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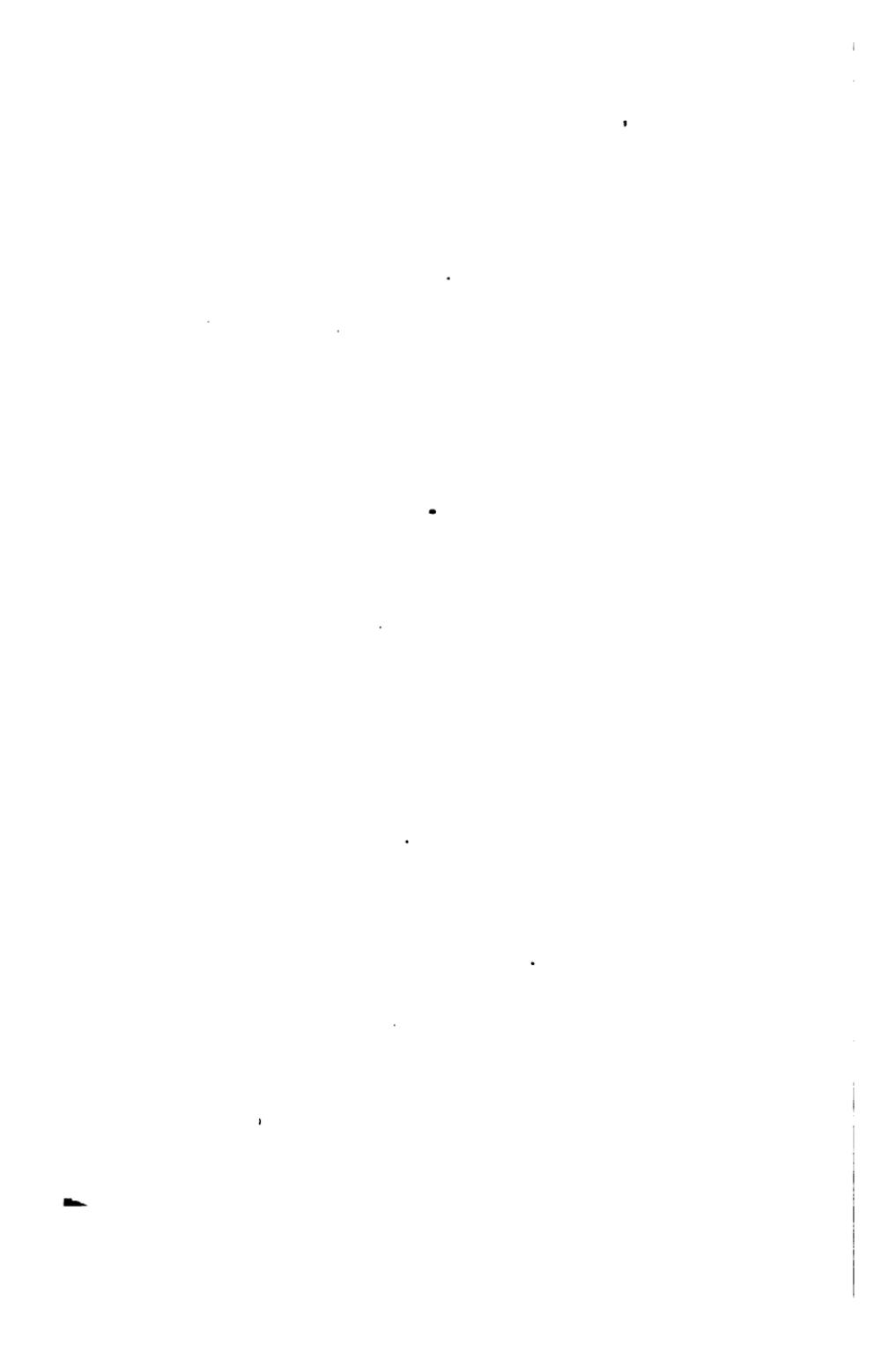
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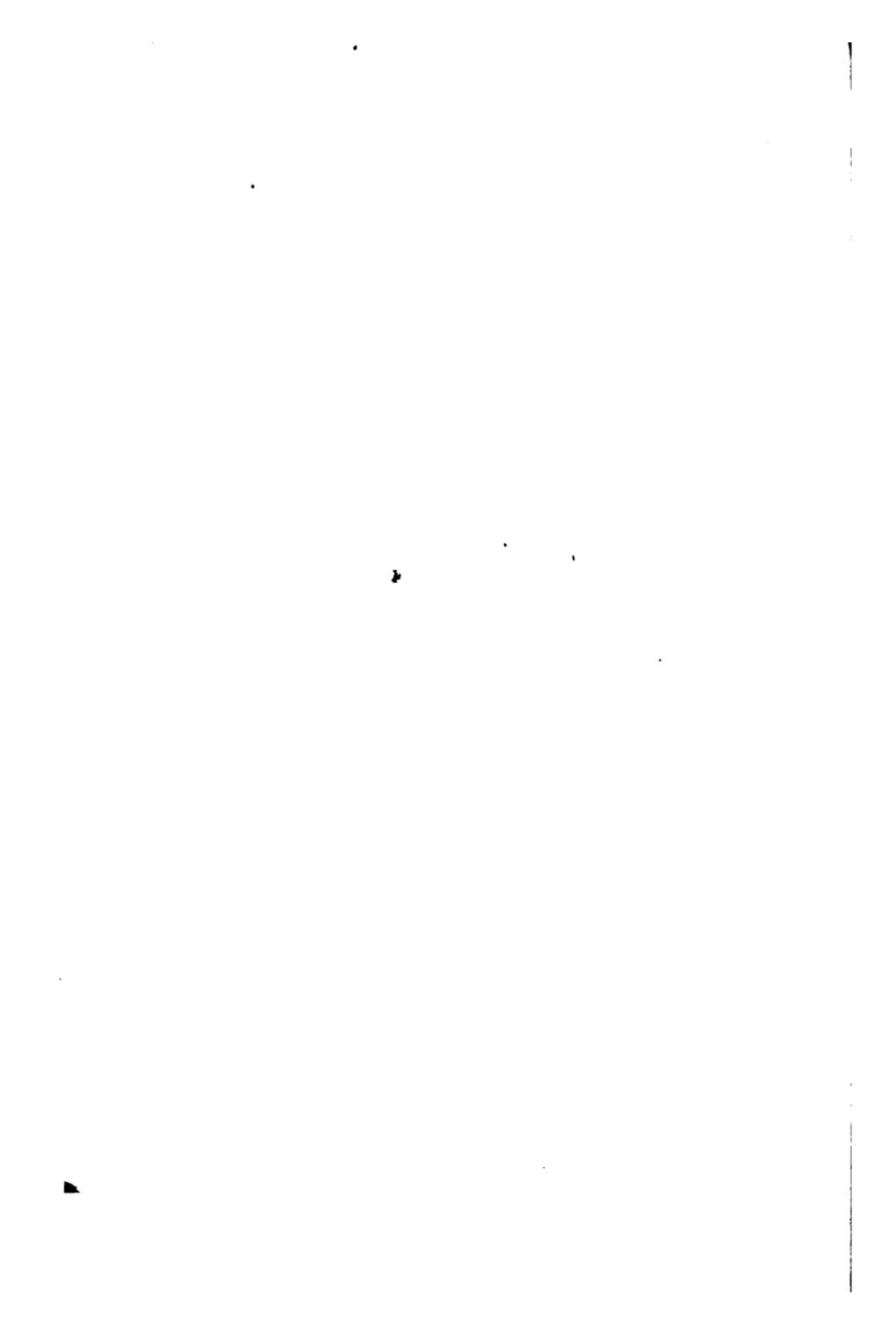
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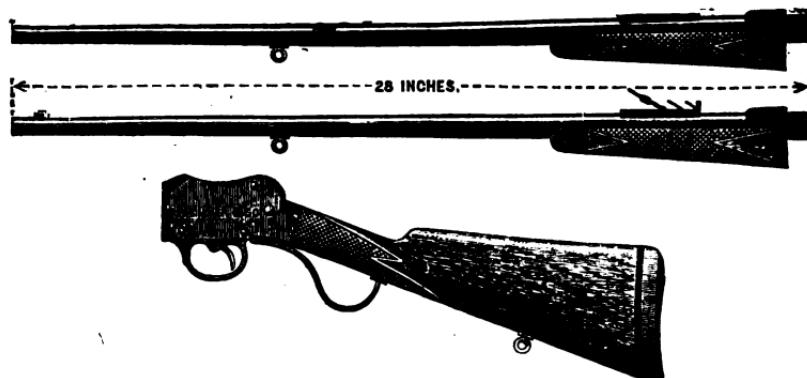
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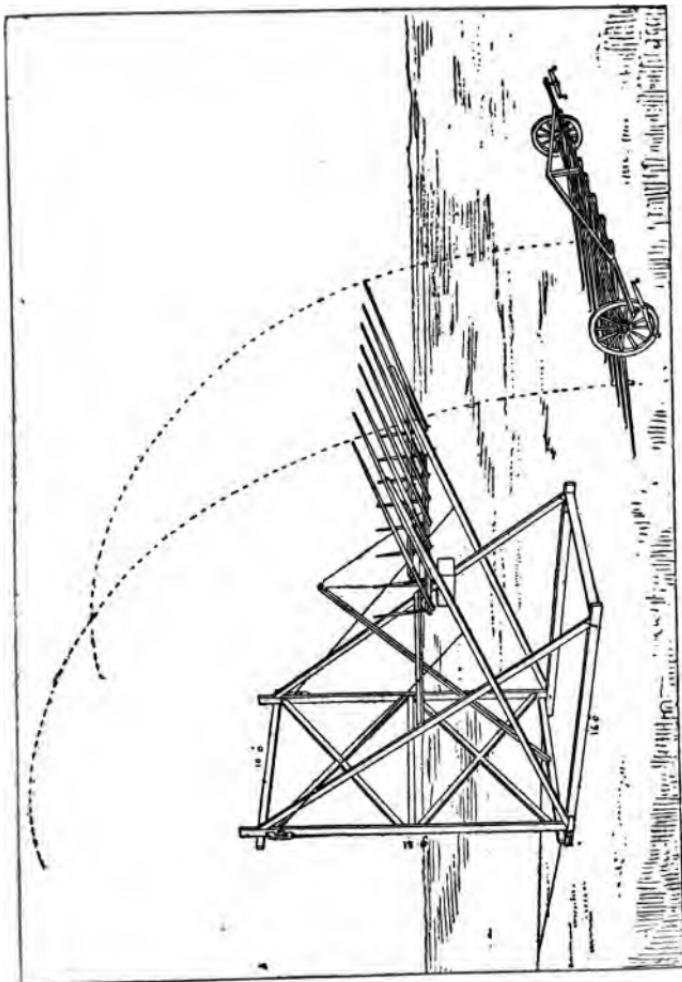
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*Frontispiece.*

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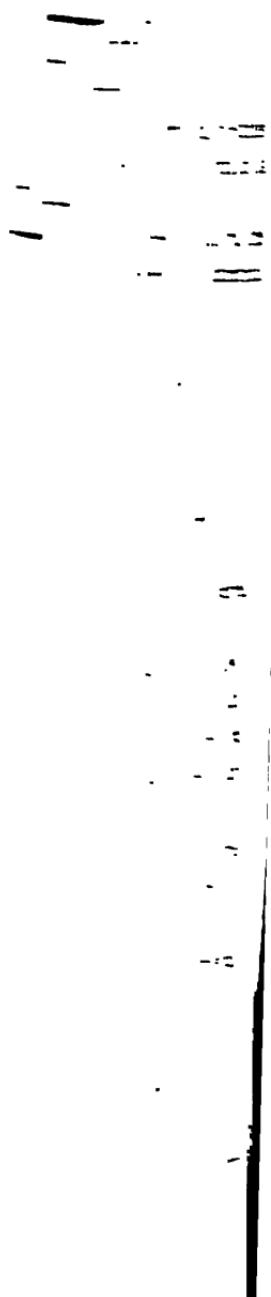
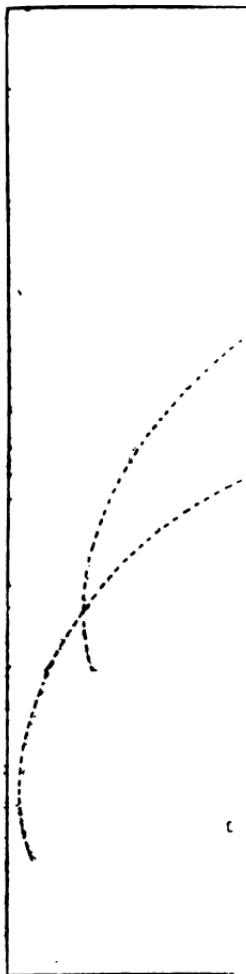
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# GO WE S.

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# GO WEST!

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## CHAPTER I.

### WHO SHOULD GO.

FTER a long residence in the Western States of America, I have just revisited England. The number of inquiries I have had here from persons, either intending to emigrate themselves or to send out relatives, has emboldened me to write a few chapters on the country itself; the most profitable businesses to engage in; the amount of capital they require to carry them on successfully; and the best means to acquire the necessary experience.

I have endeavoured to make my remarks as simple as possible, and to confine them to matters of minor detail, which will be of more use to people seeking information than the mass of statistics and geographical matter from which so many works on this subject have been compiled.

I have selected to illustrate at length a few of the businesses that can most suitably be engaged in by men who have had no previous experience. There are many others in which similar results may be obtained, but my space only allows me to notice them in a cursory manner. If this book, however, meets with the favourable reception I hope for, I may at a later date be tempted to treat some of them more fully.

I am sure that my remarks may be read with advantage by all intending emigrants, as I have used every endeavour not to make my figures too flattering, but to convey as clear an understanding as is possible in a short article of the nature and way of carrying on those businesses on which I touch.

Still, I do not pretend to give information enough to enable any one to at once engage in the businesses treated of, for I consider it essential that every one should have a certain amount of practical experience before engaging in anything abroad. The best means of obtaining this, which can only be gained in the country itself, I shall endeavour to point out.

In countries developing so rapidly as are the Western States of America and the Western provinces of the Canadian Confederation, there are very numerous opportunities for men with small capital to start a business in and around new towns rapidly increasing in size. If these men are economical at first, and curtail their expenses as much as possible in order to increase their capital, the growth of such towns, and further development of the surrounding country, may be depended on to extend their business, even more rapidly than they can their means to carry it on.

Yet, from long experience, I should say that not over ten per cent. of the people above the rank of a labouring man who go to America succeed there, though the reason of this is not hard to find.

A large percentage of such persons are idle, worthless fellows, without the elements of success in them under any circumstances ; these their friends will find it cheaper to keep at home, for they almost invariably return there as soon as they have spent whatever money they have taken with them, which, with their passage-money, is entirely wasted ; while, of those that are fairly steady, the greater number go without the slightest idea as to what they are going to do, or how they are going to do it ; nor have they, in many instances, either capital or practical knowledge enough to command success. Unless a man has sufficient capital to start some business, or has some profession or trade at his finger-ends, he had much better remain in England, where he has friends who may be able to do something for him, than lose time and money in going to America, where he will have only himself to rely on. No one can hope to succeed there, or in any of the colonies, without hard work, application, and some experience. It does not follow, therefore, that, given both brains and

capital, success will be obtained. Prices, ways of conducting business, style of living,—all are very different in America to what they are in England; while numerous sharps are always on the look-out, ready to take advantage of the greenness of the new-comer.

Under no circumstances should I advise any to start for America unless they first find some reliable man to whom they can at once go, and with whom they can stay till they become somewhat accustomed to the country and its ways. New-comers are exposed to many temptations, and numbers of young men, who might otherwise have succeeded, have frittered away their capital hanging round the large cities of the East and West, deluding themselves with the idea that they were waiting for something to turn up.

It is a most injudicious thing for parents or relatives to intrust to young men considerable sums of money, when most probably they have the vaguest ideas of its value, especially on the eve of starting for a new country. The best policy is for any one going out from England to make arrangements so that any funds he may have at his disposal, beyond those absolutely necessary for his actual expenses, shall not follow him for at least a year; he cannot in less time acquire the necessary experience to enter into any business; if he has his capital at hand, he will be constantly seeing, what *he* may consider, chances that will tempt him to start for himself, and this, if yielded to, until he has learnt a business, means failure.

Having made up his mind to go to America, a man may either determine on the business he means to follow before leaving the old country, or he may reserve his decision till after his arrival there; but, having decided, he should make up his mind not to change, unless under heavy pressure, or it will be fatal to his chances of success.

As soon as you have determined what part of the country is best suited in climate and natural surroundings to your taste, the first step is to discover some reliable man living in the chosen locality.\* If you can find no one among your friends or acquaintances who knows any one suitable,

\* See author's advertisement at end of book.

search in a map till you find the name of some country town about where you want to go, and write to the post-master there, asking him to give you what particulars you may require about the country, and to send the name of some reliable man with whom you may stay, enclosing a post-office order for a small sum to reimburse him for his trouble. You will always get an answer, for a post-master in the States is a Government official of some importance, who is in most cases very civil, and ready to give information.

Having, by one of these means, found a suitable man, whose charge for board should not exceed £1 per week in a country town or 25s. in a city, you can make arrangements for staying with him as long as you may consider advisable.

After a few months' stay, an idea as to what business is best suited to your requirements should be arrived at.

Having now become somewhat used to the ways of the country, you should be able to find some one in the business you have selected who, in return for a small premium and your assistance in the office, will board you and teach you all that you require to know.

This, however, I do not regard as a particularly satisfactory arrangement for either party, as the teacher may not consider himself under it justified to use his pupil to the best advantage, or, if he does, the pupil may consider that more than a *quid pro quo* is demanded of him. If you have the spirit which is necessary for success, it will be better for you to take a situation with some man in the business you intend to follow, even if at first the salary is very small, and to make up your mind to do the very best you are able, no matter how hard you may find it at the commencement. By doing this, you should, at the end of your term of probation, have acquired a thorough knowledge of your business, and, in addition, have the satisfaction of knowing that you have not been drawing on your capital for your support in the interim. Let me again caution you that, having once made up your mind to engage in a business, you should not alter your determination, unless for the gravest reasons. To a green hand any business will probably seem hard and uninteresting at first, while you will be continually hearing

how much better your chances would be in something else ; once, however, your mind becomes unsettled, and you begin to change your plans, I regard your chances of success as poor : believe me, that, if you only stick long enough to the work you have taken up, it will grow on you, and, as you get more used to it, you will begin to like it.

There are few businesses a man can make a mistake in taking up in the States, if he will stick to it, no matter how depressed it may be at that particular time ; indeed, I think there is no better chance than to start into a business during a season of severe depression in it : you are then sure to learn to use every possible economy in conducting it, so that, when good times come again, you are enabled to reap the full benefit of them.

Another reason is, that a term of depression and low prices is sure to be followed at an early date by—to use an Americanism—a “boom.” The cause of this is to be found in the volatile nature of the majority of American business men : as soon as any particular occupation promises to become more than usually remunerative, hundreds leave their own business and at once embark in it, consequently it but for a short time, if ever, fulfils its early promise, because there are too many men at the game. As soon, however, as the depression, always caused by overtrading, sets in, most of the men go out and engage in something else that is commencing to boom ; then the trade, relieved from too much competition, rapidly becomes more profitable, and enables those who have remained steadily in it to reap a good harvest before it again becomes sufficiently remunerative to attract the floating element.

I will take, for an example of this, the business of baling and shipping hay, with which I am well acquainted. Some years ago there were but few men in the trade, all of whom were making a fair profit, though using the old-fashioned and somewhat clumsy beater-press. As the great cities grew larger, however, the demand for baled hay increased, for the supply of loose in the country surrounding them, within easy hauling distance, became too small to meet the demand ; about this time, too, the Dedrick steam and movable horse-presses were invented. These, by their superior qualities and the smaller bales they made, gave a great impetus

to the trade ; the price of baled hay in the cities went up, while the cost of pressing and shipping went down ; baled hay, being so much more convenient to handle, became daily more popular, and threatened to soon drive the loose article out of the market. Farmers, at a distance from large cities, began to seed down more land ; wild meadows never before used, except for pasture, were got into shape and cut ; while hay-barns and presses sprang up at nearly every station where hay could be obtained. With what result ?

In three years baled hay was selling in the large cities at less than the cost of production ; while, worse still, owing to the inexperience and dishonesty of many of the newcomers, a large proportion of the hay had been baled when not in a suitable condition, or had been actually rotten when pressed. This, of course, buyers could not detect until the bales were opened for consumption, so, in consequence, of the losses they sustained in buying poor stuff, they soon began to discriminate against baled hay, and loose outsold it from 25 to 50 per cent.

A year or two of this broke many dealers, and disgusted more, who promptly left the trade. Those who were left in, being mostly men of capital and experience, were enabled to hold their hay to stiffen prices, which, in consequence, soon began to rise ; this tendency is steadily increasing as buyers begin to regain confidence in baled hay. While many farmers are ploughing up their meadows, the cities are still growing, so in another year or two the supply will again fall below the demand, and high prices will be realised by those who have remained in the business.

Of course, after a short season of large profits, the outsiders will again rush in, and a like succession of fall and rise will take place.

The same thing has occurred, and is occurring, in most other businesses.

It will be noticed, from the above example, that a man who had left his own business to engage in the hay trade when prices were at their best would, in all probability, have been a heavy loser. He could not have had time to buy his machinery, erect his buildings, and work a trade together, before the fall came, while being new to the business, and not used to the small economies practised by

the trade in dull times, he would feel the dropping prices more severely than his older competitors; to add to his chagrin, his original business, depressed when he quitted it, would, probably, now be booming, leaving him the poor satisfaction of comparing his possible gains, if he had remained in it, with his certain losses in the trade he had engaged in.

The best time to start for America is August or September; you may then be pretty sure of a pleasant passage. This will give you time before the commencement of the new year to determine what business you would prefer, and to seek out some one with whom to learn it. I consider the pleasantest route, after having tried all of them, is that taken by the Allan line to Quebec, as you are a much longer time in sight of land than by any of the lines running to New York. By this line you would leave Liverpool on the Thursday, Friday morning you would wake up in Lough Foyle, where the steamer remains off Moville till evening for the mails to come from Londonderry. During this time you can have a few hours' run on shore. On the Wednesday evening after leaving Lough Foyle you will probably sight Labrador, remaining in sight of that coast, Newfoundland, and Anticosti till you enter the St. Lawrence, going up which the scenery is very beautiful. On Saturday evening you probably reach Quebec, where a mail train, running through to Chicago without change of cars, meets the steamer, reaching there in some thirty-eight or forty hours. Or you can go from Quebec to Chicago by water, following the St. Lawrence, the Welland Canal, and the great lakes. While going through the Welland by this route, you will have time to run over and see Niagara. The scenery through the Thousand Isles, some parts of Lake Huron, and the Sault St. Mary, is very fine. This route will take from five to six days, and will not cost any more than going by rail.

From Chicago, which is the great railway centre of the West, railroads run to all parts, so you will have no difficulty in getting on from there to wherever your destination may be.

The railroads in the States and Canada are very fine, though the trains do not run as fast as they do in England,

not exceeding, as a rule, thirty miles per hour. The coaches are very long, with a passage down the middle, and seats for two persons arranged in rows across the car on either side of it. At each end of the coach is a door, outside of which a platform enables the passenger to pass easily from one coach to another, even when the train is in motion. They are entered from the stations by steps ascending to these end platforms. Pullman cars are attached to all through trains. In them a berth can be obtained for 10s. per night. During the daytime the beds are turned up, and the car transformed into an elegant drawing-room. A smoking-room, card-room, and lavatory are attached to the car.

On some trains meals are served in dining-coaches; others stop twenty minutes each meal-time at dining stations. The food provided, however, is poor, and the charges high, so the passenger had better provide himself with a sufficient supply before starting. This fault will, I fancy, be amended in the near future. The arrangements for taking care of luggage are admirable. On leaving the steamer the baggage is checked,—that is, a strap, to which a brass plate about  $1\frac{1}{2}$  inch square is attached, is fastened to each package, and a similar square of brass, with a corresponding number, is handed the passenger, who has no farther trouble with his luggage, except passing it through the Customs at the frontier, till nearing Chicago. Then a baggage - man passes through the coach, and inquires whether he is going any farther or to any hotel. If going farther, the baggage is re-checked to his destination; if going to an hotel, on giving its name, the baggage is checked to it, where the passenger finds it on his arrival. Otherwise, on production of your checks at the baggage-room at the station, your luggage is delivered to you, without any extra charge for all this trouble.

## CHAPTER II.

## RAILROADS.

THROUGHOUT the West and North-West, railroads can be built very cheaply, owing to the level nature of the surface of the country, which renders little cutting or grading necessary. The main expense is for bridging the wide and frequent rivers. All the roads are broad gauge, but the permanent way is not laid in so expensive a manner as in England, the rails being simply spiked to the sleepers (American ties), nor are the roads so carefully ballasted as they are here. The reason of this is, that trains not running at such a high rate of speed, the wear and tear of the permanent way is not so great. Most lines are single, with sidings at the stations to allow trains to pass one another. The engines are more powerful than the English ones, and the freight-cars much larger; box-cars, which are used for carrying grain, hay, and miscellaneous merchandise, are from 28 to 34 feet long, 8 feet wide inside, and 6 to 8 feet in height; the newer cars are the largest, with a growing tendency to increase the size. Box-cars are entirely enclosed, and water-tight, so that no tarpaulins are required. Their capacity is from 10 to 12 tons of baled hay, 400 to 500 bushels of wheat or rye, 450 to 550 bushels of corn, and 800 bushels of oats. Grain is loaded in the cars loose. Coal-cars are 28 to 30 feet long, by 8 feet wide, and hold from 20 to 25 tons. Lumber is loaded on flat cars. A load is 8,000 to 12,000 feet, according to its dryness.

Instead of keeping a lot of porters idling round the stations, doing nothing most of the time, in America the *employés* are carried on the train. At any but the large terminal stations (American, depots), the only force employed is the station agent and telegraph clerk, the latter of whom is partly paid by the telegraph company. The crew of a passenger train consists, besides the engineer and stoker, of the conductor or guard, a much more important

personage than in England. He is generally a smart, well-educated man, on whom all responsibility rests; he is assisted by one brakeman for each car on the train. The luggage is looked after by the baggage-master, who is allowed an assistant if the train is a heavy one. Just as a train is reaching a station, the baggage-master throws back the doors of the baggage-car in which he rides and gets ready all packages checked for that particular station; the moment it stops, the brakemen assist to hand this out, hand in anything that may be going on, the conductor calls all aboard, and in a few seconds the train is again in motion. The passengers (even old women) know their business, and are ready to step on and off the moment the car has come to a stand-still; five minutes previously a brakeman passes through the car calling out the name of the station they are approaching. Powerful brakes are used, so the train does not slacken till almost in the station, and as soon as the brakes are taken off resumes its normal rate of speed. By these means much valuable time is saved, and the permanent way has not to be racked by the maintenance of a high rate of speed between stations in order to make up for the time lost in stopping. This is very different to the English system, by which five minutes is generally lost in stopping at some small country station to pick up, perhaps, a single passenger with half a hundred-weight of luggage, which it takes two or three porters, watched by a station-master and ticket-clerk, to load.

Another great advantage is, that night trains run between all the large cities. By one of these a business man can leave Chicago after his day's work is done, get a comfortable night's rest on the cars, and wake in St. Louis or Cincinnati ready for the day's business; while the following night he can return to Chicago, instead of losing a day each time in going and returning.

Except on very long journeys, there is only one class besides the Pullman sleeping-cars. The local fares are three cents ( $1\frac{1}{2}$ d.) per mile, with long-distance tickets at reduced rates. Most roads sell 1,000-mile tickets for 20 dols., or 1d. per mile: these are good till 1,000 miles have been travelled in any number of trips, the conductor punching out the number of miles ridden each journey.

The passenger-cars and the system of handling luggage I have described already. Not much money is as a rule expended on the station buildings, but still they are sufficiently commodious for their requirements.

In hauling freight cheaply, the American lines are even more advanced. The gang employed to handle a freight-train consists, besides stoker and engineer, of a conductor and two brakemen, with extra hands on heavy trains. These men load and unload at each station all local freights in less than full car-loads; that which is to be loaded is placed by the shipper conveniently on the platform, on which what is unloaded is also put. Full-car lots are switched into the siding and unloaded by the consignee. If a shipper requires an empty car to load, he notifies the agent, and the next local puts him one on the siding.

Rates vary according to distance and description of merchandise. On short hauls, for miscellaneous freight in less than car lots, it runs from 4 to 6 cents per ton per mile; for car lots it is from 2 to 3 cents only.

From Chicago to New York, some 900 miles, rates at present are 25 cents per hundred for flour, grain, and feed, and 30 cents for provisions, that is, at the rate of '005 to '006 per ton per mile, or a little over a farthing.

With cheaper iron under a lower tariff, these rates will be materially reduced, and, as nothing adds to the prosperity of a country so much as cheap transportation, a season of very good times undoubtedly lies before the West.

The parcels traffic is at present in the hands of the express companies, who pay the roads a certain annual sum. By express any article can be sent C. O. D., that is, for the bill to be collected by the express agent on delivery; for example, if you require anything from any of the large cities, you send your order to a merchant there, requesting the goods to be sent C. O. D.; he ships them, enclosing his bill to the express agent; on payment of this, the goods are delivered to you, and the money remitted to the merchant. This system greatly facilitates business.

The express business is carried on entirely by passenger-trains, consequently the charges are somewhat high. Heavy articles, however, can be ordered without prepayment in the following manner:—The goods required are sent

by the merchant, directed to his own order ; at the same time a bill for them with a delivery order attached is sent to the local bank, or, if there is no bank, to the express agent ; on payment of the bill, the delivery-order is handed to the customer, who presents it to the station agent, by whom the goods are delivered to him. This is a great convenience, as, in the event of a break-down of machinery requiring repairs, or anything else being wanted in a hurry, it can be telegraphed for and despatched by first train. In sending car-loads of merchandise to any one of whose stability one is not assured, the following safeguard may be used :—The bill of lading you have made out to yourself, with the address of the consignee on the margin ; this you endorse, and attach to it a draft for the value of the goods. This draft and bill either you, or your banker, forward to a bank or express agency in the town for which the car is destined. The consignee is notified, calls round, pays the draft, and obtains the bill of lading, which, being endorsed, entitles him to take possession of the car.

On the arrival of the car, the consignee, whose address is likewise on the way-bill, is notified, and, on his producing the bill of lading, it is placed at his disposal on the team-track, where he is allowed forty-eight hours to unload it.

On each team-track are scales, over which every load coming out of the yard has to pass ; every car has a separate number, and an official record of the weight of merchandise taken from each is kept, which can be inspected by the shipper, if at any time he is dissatisfied with the weights returned by the consignee. On application, the latter can have an official ticket of the weights, which he can forward to the consigner, if necessary, to convince him that he has accounted for all stuff received.

If the car has to be placed on some other road, or in a private switch, the charge for switching is 1 dol. 50 cents to 2 dols. There is no charge for switching in an empty car to load, or in taking out a loaded one. Freight bills are always paid by the receiver.

Ventilated cars are supplied for the transportation of fruit, and refrigerator ones for the conveyance of butter and meat. The stock-cars are very roomy, holding from 50 to 70 hogs, or 15 to 20 cattle ; the double-decked sheep-cars

will hold some 150 to 200 sheep. At every station are commodious yards for the reception of stock, with shutes for loading them into the cars.

The permanent way is divided into sections of six miles; each of these is kept in order by a section boss and two hands. The train hands set the switches themselves, so no switchmen are required at small stations. Nor are there any signalmen at them, as the trains are run on time schedules. In running the trains, the telegraph is freely used, the conductors taking their orders from the station agents. Very punctual time is generally kept, but, if a train is from any cause delayed, it often falls very much behind, as it has to give right of way to that train which should have the road according to the time-schedule. Serious accidents, considering the mileage open, are rare. In running through a well-settled country, stations are generally some six miles apart, with sidings for loading freight at more frequent intervals.

The onus of fencing the line, when running through private land, lies on the company; if through their neglect any stock gets on the line and are injured, they have to pay for it. The crossings of public roads are quite open, being unprotected by gates; when approaching one, however, the engineer has to whistle, and continuously ring the sonorous bell attached to the engine.

In order to keep cattle from straying off the road on to the railroad, cattle-bars are made on each side of the crossing. These are formed by running the fence on each side up as near as possible to the line; in the intervening space a ditch some four feet deep and eight wide is dug; this is bridged by four-by-four scantling, set at an angle with the edge up, about a foot apart; cattle cannot step on these, so they form a most efficient barrier.

In front of each engine is a cow-catcher to clear the line of obstructions; this will throw any animal out of the way without the least jar being felt on the train, but with disastrous results to the beast, no matter how slow the engine may be travelling. Notwithstanding these open crossings, accidents are very rare at them.

In all the large hotels are ticket-offices, at which railway tickets on all lines can be obtained; these save much time

and crowding at the stations. Round-trip (return) tickets at single fare are issued to business men who are customers of the road.

Doubtless some people will ask, "How about the unhappy shareholders of some of the American roads under these low rates?" This is easily answered. Of the non-dividend paying roads there are three classes. First, those old roads which cost so much to build that under no circumstances can they hope to hold their own with more modern competitors. Take for instance the Erie. This road was built some time ago, when railroading was in its infancy, and it was not known how steep a grade a locomotive could climb, consequently its gradients were made much easier than on some of the later-built roads. As, in order to reach tide water, all the Eastern routes have to pass through a long stretch of mountainous country, this added very materially to the cost of construction. At the time it was built, too, material and labour were higher than at present, and the cost of handling and delivering them much heavier, while large sums were stolen and wasted in constructing it; besides, the Erie runs for very many miles along the banks of the Susquehanna River, whose frequent bends necessitate a somewhat circuitous route, while the narrowness of the valley does not afford nearly as good an average of local freight per mile as that enjoyed by many of its competitors. I have no doubt that a paralleling road could be surveyed and built for less than one-fourth the supposed cost of the Erie. What chance, then, under these circumstances, and burdened as it is with a heavy floating debt, has it of ever paying a fair return on even its actual, much more its supposititious, value?

The second class are those which, though originally strong, have been manipulated for stock-jobbing speculations; in furtherance of these they have taken into their system a number of bankrupt and undeveloped lines, in supporting which the profits of the parent road are entirely absorbed. As an example of this class take the Wabash. Much of the 4,000 miles of this system runs through a rich territory, from which its competitors, notably the Illinois Central, draw revenues sufficient to pay a high rate of interest to their shareholders; but it has leased many bankrupt lines,

like the Pekin and South-West, and built many branches into at present undeveloped countries; in addition to which it is bonded far above its actual present value, though, were it to abandon the bankrupt lines, and cut down the traffic on the undeveloped branches to the smallest possible dimensions till the average freight per mile warranted an increase, it might, at no distant date, be enabled to pay interest on these, and have something over to divide among the shareholders.

Examples of the third class are the Northern Pacific and Canadian Pacific, which run through a very fine wheat country for almost their entire length. This territory is now almost entirely undeveloped; but as it is settled up, and the present unexampled depression in its chief cereal disappears, the revenues of these roads will gradually increase, till in time they will return a large annual income to their owners.

Undoubtedly, railroad building in the States has lately been over-done, the mileage having increased too rapidly in proportion to the growth of population and of the acreage under cultivation; many roads running so near each other that the territory between them does not at present afford freight enough per mile to support both of them; while from Chicago and other large cities there are many through lines running to New York, the Ohio and Missouri rivers, and other terminal points.

In order to prevent ruinous competition among these, pools are formed, by which the same rates are charged by all parallel routes, and a commissioner is appointed, who decides to what proportion of the total receipts each road is entitled; their interests, however, are so conflicting that these pools seldom last long, and on their falling to pieces a railroad war ensues; then rates are cut to an alarming extent, till the roads, getting tired of running at a loss, come together again, and a new pool is formed. These wars are injurious to the prosperity of the companies, nor do they help legitimate business, as they tend to unsettle values. A railroad clearing-house system is now mooted, which may turn out more stable than the pools generally do. All railroad managers are in the habit of making contracts with large shippers, by which, though apparently paying the

full tariff, they are given a rebate of so much per car on engaging to ship a certain number in a given time. This rebate is repaid them at the end of the appointed time. This system decreases the revenues of the roads, and discriminates against the smaller shippers.

To any one who has passed some time in America, the English roads seem decidedly behind the age. Not only is the system of handling luggage on the other side of the Atlantic far superior, but the passengers are treated more like rational beings there, and not subjected to the numerous petty restrictions and annoyances they are in England. It is true that some of the trains here make faster time, but, unless one's journey lies between some of the large centres of industry, I doubt whether the average time made is much better in one country than the other.

I regard the present depression in British agriculture as caused in a great measure by the high freight charges made by the railroads. They, even more than the Erie, were built when railroading was in its infancy, and could consequently be duplicated for much less money. In order to admit of the high rate of speed the passenger trains maintain between stations, the permanent way has to be correspondingly solid, entailing double the expense of a freight road run at a moderate rate. In addition, they are managed on an old-fashioned and most expensive system. If new roads paralleling them could be built as freely as they can be in America, and were operated as cheaply, the shareholders of the old roads would soon be in the same boat as those of the Erie.

At present the English agriculturist is as surely being throttled by their iron bands, as his American *confrère* has up to the present been by Protection.

## CHAPTER III.

## CHICAGO.

CHICAGO, which affords the best market of the American continent, if not of the world, for all agricultural produce, is situated on the west shore of Lake Michigan, at the mouth of the Chicago River. Fifty years ago its site was a swamp, with the exception of a sand-bank on the edge of the lake, on which stood Fort Dearborn ; round this fort a few houses sprang up, but it was not till railroads began to be built in the West that Chicago really got a start ; since then it has never looked back, and the marsh of forty years ago is now covered by a city of 500,000 inhabitants, growing at the rate of 30,000 annually.

In consequence of its swampy site, all the principal streets are raised six to eight feet above the original level, those which are not raised being quite impassable in soft weather. From its lowness, the site is not a particularly desirable one for a large city, but the two branches of the Chicago River afford a considerable amount of dockage, while Lake Michigan furnishes water transportation to all parts of the world, by way of the Straits, Lake Huron, the St. Clair River, Lake Erie, the Welland Canal, Lake Ontario, and the St. Lawrence. The Welland Canal is being enlarged to admit the passage of ocean steamers of considerable tonnage, which will largely add to Chicago's through trade. From Lake Erie the Erie Canal runs to New York, and affords a cheap means of transportation, during the greater part of the year, for grain, &c.

A canal also runs from Chicago to the Illinois River ; this gives water communication with the Mississippi River, western and southern points. A ship canal from Chicago to the Mississippi is contemplated, and will undoubtedly be carried out in the near future. But what has really made the city is the railroad, for it is the terminus of all the great Eastern lines and the initial point of most of the

Western ones. Owing to the nature of the ground, the railroads mostly run through the city at the same level as the streets, which they frequently cross, and sometimes run along. This seems dangerous to a new-comer. Railroads, however, in America are not regarded in the same light as they are in England, where the absurd behaviour of the companies, in treating their customers as so many children, have so babied the public that they regard them with feelings of terror. In the former country the people are familiar with all the details of working the roads, and with their signals ; so, notwithstanding the unprotected crossings, the percentage of accidents is no greater in proportion to mileage than in the latter one.

Chicago, from its situation, is the natural receiving point of all Western produce, and the distributing point of all merchandise from the seaboard and the Eastern States. In consequence, prices in the West are regulated by the Chicago market and the distance the produce may have to go to reach that place. The amount of live stock handled annually at the Union Stock Yards is simply astounding, while the elevators have a storage capacity for over twenty million bushels of grain.

The bulk of the grain received in Chicago is sold on the board of trade by brokers, whose charge for commission is half a cent per bushel. There is a large amount of speculative trading in grain, which frequently holds the market up or down when the state of the crops or the demand for produce does not warrant it. This speculation is certainly injurious to the producer, who has not the capital to hold his stuff for a favourable market, as he frequently has to accept a poor price for a poor crop, when, if the natural laws of supply and demand were not disturbed, the small amount raised would fetch so much more per bushel as to nearly equalise matters ; this makes grain-raising for market a somewhat risky business.

Gambling in grain has in another way done much to injure the American farmer ; his surplus having to be exported, of course its price in foreign markets, especially Great Britain, must eventually determine the value of his crop. Disregarding this natural law, the heavy speculators in Chicago have for some time kept grain there at such a

price that, with freight added, it would leave no margin of profit to the exporter ; in consequence, European dealers have sought their supplies in other markets, whose natural advantages would not have allowed them otherwise to compete with America. From this cause much trade has been lost, and, as it takes some time to divert trade from any particular channel, it will, I fear, be some years before the United States regain that supremacy in the corn trade that belongs to them by natural right.

Another thing that militates against the success of the Western farmer is the high tariff on iron and most manufactured articles ; under it he has to pay double their real value for most things he buys, while the cost of railroads, the cheapness of which is the most essential factor to the prosperity of a farming community, is increased one-half. Thanks, however, to more judicious management, freight is hauled there far cheaper than in old-fashioned England.

Another disadvantage of protection to the farmer is that it curtails his market, for all foreign countries would take more of his produce if they could pay for it in goods rather than in gold ; *if*, however, the Democratic party redeems the pledges through which it has mainly got into power, this evil will soon be materially amended ; so, as the farmer has managed to struggle along thus handicapped, there should be a season of great prosperity before him when his weight is reduced.

One great advantage Chicago has as a market is the certainty of a shipper from the country being able at all times to effect an almost immediate sale of any kind of produce, which saves much annoyance and expense. The daily papers report the markets very fully and accurately ; while special circulars are printed for all the more important branches of trade, which the commission men mail to their customers in the country as frequently as may be necessary.

The streets of Chicago are very wide and perfectly straight, intersecting one another at right angles. The pavements, or sidewalks as they are called, are also wide. On most streets tramcars are run, which will transport passengers to any portion of the city for 5 cents ( $2\frac{1}{2}$ d.).

As the city is growing at the rate of 30,000 annually, its suburbs are spreading in all directions ;—these afford fine

opportunities for men to engage in all sorts of urban businesses.

Rents are rather high all over the city, as are also taxes at present, improvements having lately been carried out on a gigantic scale, making high rates necessary. All traces of the great fire of 1871, which destroyed the greater part of the city, have now disappeared, magnificent fire-proof buildings, constructed entirely of iron and stone, having been erected in place of those burned. Conspicuous among these are the Court House, Custom House, and four principal hotels—the Tremont, Palmer House, Grand Pacific, and Sherman. State Street, which is continuously built up for over ten miles, is the finest street, that part of it running through the business centre of the city being unrivalled for width and grandeur of buildings by any street in the world.

The American currency is on the decimal plan, and consists of dollars, written thus: \$1·00, and cents, which are indicated by figures placed after the decimal point, thus: \$1·50, one dollar and fifty cents; '50, fifty cents; '05, five cents. Each dollar contains one hundred cents; a cent is worth almost exactly a halfpenny, at which it may be taken when turning American prices into English ones. An English sovereign is worth 4 dols. 84 cents, so that a dollar is practically worth 4s. 2d. The coins in use are cents, two cents (both copper); five cents (nickel); quarter, 25 cents (silver); half-dollar, 50 cents, also silver; the dollar, both gold and silver, the former seldom met with. The gold coins are the  $2\frac{1}{2}$  dollar, 5 dollar, 10 dollar, and 20 dollar pieces, the latter a very handsome coin.

The paper currency consists of greenbacks and National Bank-notes, both on a par with gold, and generally preferred to it. The denominations are, one dol., two dols., five dols., ten dols., 20 dols., 50 dols., 100 dols., 500 dols., and 1,000 dols. The greenbacks are issued by the Government, and are exchangeable for gold at the Treasury or sub-treasuries; the National Bank-notes by the banks, but they are equally safe, as National bonds to an amount of ten per cent. in advance of their issue have to be deposited by the banks at the Treasury to secure the redemption of their notes.

Banking, in the large cities, is carried on mainly by the National Banks, which are banks chartered by the Government to issue notes on deposit of bonds, and are subject to periodical examination of their accounts by Government experts. There are many private banks in the country, but room for many more. The system of banking is somewhat different to that pursued in England, overdrafts being seldom or never allowed, but advances on bills of lading being customary; this is a great advantage to a country shipper. The business of the city banks consists largely of advancing on the deposit of warehouse receipts, stocks, and bonds. The late heavy fall in wheat having more than exhausted the bank's margin on warehouse receipts for that grain, many of the Chicago and New York banks that had made heavy advances on this security have had to suspend, and others are in a shaky condition.

In business, only short credit is given, thirty days being the usual limit, but good notes are largely taken in settlement. Tradespeople generally sell for cash; if any credit is given, a monthly settlement is usually expected. An exception to this is the trade in agricultural implements, which is largely carried on by agents of the manufacturing firms; these are empowered to give time to any farmer purchasing of them, taking his note for the amount: for small sums these notes generally run a year, but for larger amounts notes are given for proportionate parts, falling due respectively at the end of one, two, three, and even four years; for instance, the purchaser of a self-binder at 180 dols. would give a note for 60 dols. due in one year, a similar note due in two years, and a third due in three years. These notes generally bear seven per cent. interest, while for cash there would be a discount of ten per cent., so, though often a great accommodation to the farmer, he has to pay for it pretty smartly. The system is a bad one for him, too, as he is frequently tempted by the long credit to buy implements he could do very well without.

At an American hotel, the usual plan adopted is to charge so much per diem for board and lodging, this charge including everything but liquor and boot-cleaning; beyond which there are no extras for anything, and no gratuities

to servants. In the first-class Chicago hotels, the charge is from 3 dols. to 4 dols. per day according to size and situation of room, but with equal privileges as to board. As an elevator (lift) is always running, all parts of the hotel are easily accessible. There are many smaller hotels in the city at which one would be made very comfortable for 2 dols. per day. There are also hotels on the European plan, at which rooms can be obtained for from 50 cents to 1 dol. per day; to these restaurants are attached, in which anything can be obtained, at any time, at reasonable rates. In the former class of hotel the meal hours are usually—breakfast, 7 to 9; dinner, 12 to 3; supper, 6 to 8; except at these hours, no meals can be obtained. In the country, all the hotels are run on this plan, the charge varying from 1 dol. to 2 dols. per day. Usually weekly board can be obtained at them for from 5 dols. to 7 dols. 50 cents. Board can be obtained in private families in Chicago for 5 dols. to 7 dols. 50 cents, and in the country from 3 dols. 50 cents to 5 dols.

Many American business men and their families live entirely at hotels, instead of keeping up establishments of their own, in consequence of the difficulty of obtaining good domestic servants; the dearth of these is one of the greatest drawbacks that the West of America, in common with all new countries, suffers from. In Chicago, fair servants can generally be obtained, but their wages are very high, ranging from 3 dols. to 5 dols. per week; in the country, good ones are almost unobtainable, and even poor ones are not always to be met with. A mere girl, utterly ignorant of the first rudiments of cookery, will demand 1 dol. 50 cents a week; a woman, knowing but little more, gets 2 dols.; and a servant who would be considered very second-rate in England is snapped up at 2 dols. 50 cents. In consequence, in country towns, two or even three families keep home together, their women folk dividing the domestic duties among them. The men are much tidier and more handy than the average Englishman, so they require less waiting on, and give less work in the house.

All over America people are accustomed to rise much earlier than in England. In Chicago, the banks open and

general business commences at 8 o'clock—in some lines, such as stock-dealing, much earlier.

It is very seldom that liquors of any sort are served with meals in the States, the usual drinks at meal-times being tea and coffee in winter; iced milk and iced tea, with a squeeze of lemon, in summer. The usual time for drinking spirits is immediately before a meal. The spirit most in request is either corn or rye whisky; it is usually taken standing at the bar. The bar-tender, who is always a man, does not pour out a certain quantity, but sets the bottle, an empty glass, and a glass of water before his customer, who helps himself. It is customary to drink the spirit first and then the water. In summer-time, large quantities of lager beer are drunk. Ale can be obtained in the cities, but is not good, to an Englishman's way of thinking. Wines of all sorts are dear and bad. The charge for a glass of whisky is 10 cents, for beer or ale 5 cents. Corn or rye whisky, if good and sufficiently old, is a pleasant and very wholesome drink in moderation; a fair article, three to four years old, can be obtained for 3 dols. a gallon. The internal revenue duty on whisky is 90 cents a gallon. Very fair cigars can be got for 5 cents each, good ones for 10 cents; smoking-tobacco is cheap: a very good grade of cut tobacco can be bought for 40 cents per pound or of plug for 60 cents. The internal revenue tax is 8 cents a pound on tobacco, 50 cents per 100 on cigars; this will probably be removed before long.

Prices of necessaries in Chicago are: \*—

					Dols.	Dols.
Tea,	per lb.	...	...	...	'50	to 1'00
Coffee	"	...	...	...	'16	,, '25
Sugar	"	...	...	...	'09	,, '12
Butter (best)	"	...	...	...	'20	,, '25
Eggs, per dozen	...	...	...	...	'10	,, '15
Cheese, per lb.	...	...	...	...	'08	,, '12
Flour per barrel, 196 lb.	...	...	...	...	4'00	,, 6'00
Small fruits, per quart	...	...	...	...	'08	,, '10
Coals, per ton (soft)	...	...	...	...	3'00	,, 3'50
"	,, (hard)	...	...	...	5'00	,, 6'00

\* See explanation of Currency, page 20.

			Dols.	Dols.
Meat, fresh, per lb.	...	...	...	10 to 14
Salt pork	...	...	...	.08 „ 10
Salt beef, per lb.	...	...	...	.06 „ .08
Ham „	...	...	...	10 „ 12
Bacon „	...	...	...	10 „ 12
Chickens, each	...	...	...	.20 „ .30
Turkeys „	...	...	...	.75 „ 1.00
Geese „	...	...	...	.50 „ .60
Ducks „	...	...	...	.25 „ .30
Kerosene, per gallon	...	...	...	12 „ 15

There is a duty on sugar according to quality, averaging some 5 cents per lb. All kinds of vegetables are cheap when in season, especially melons, cucumbers, &c.

Prices of game are as follows, per dozen, varying according to season:—

			Dols.	Dols.
Prairie chicken	...	...	...	4.00 to 5.00
American partridges	...	...	...	3.00 „ 3.50
Quail	...	...	...	1.50 „ 2.00
Rabbits	...	...	...	.60 „ .75
Pigeons	...	...	...	.75 „ 1.00
Mallard ducks	...	...	...	2.00 „ 3.00
Teal	...	...	...	1.50 „ 1.75
Small ducks	...	...	...	.75 „ 1.25
Snipe	...	...	...	1.50 „ 1.75
Plover	...	...	...	.60 „ .75
Woodcock	...	...	...	3.50 „ 5.00
Wild geese	...	...	...	4.00 „ 5.00
Venison, per lb.	...	...	...	.07 „ .10
Bear „	...	...	...	10 „ 12

All woollen goods are very dear and poor. Manufactures of cotton about same price as in England, but not as good quality. High boots are generally worn, both in city and country: rough ones for country wear cost 2 dols. 50 cents to 3 dols.; fine for city, 5 dols. to 6 dols. Boots like English ones are there called shoes; they are not much worn at present, but their use is increasing.

In the Eastern cities especially, and, to a more modified

extent, in Chicago, social relations are rapidly drifting into the English form, society being divided into grades and cliques. There is nothing yet approaching a landed aristocracy, the leaders of society being at present plutocrats. In the country and smaller towns, especially in the West, social relations are more democratic, though even there some distinctions are beginning to be drawn. Up to now, business men have been the most thought of, the ownership of land, even to a large amount, not giving the social status it does in England; but I perceive a growing tendency among successful business men to invest in land, which will, if I mistake not, cause ere long an appreciable advance in its value.

The Americans are very hospitable, and any educated Englishman will, if he behaves himself, be received into the very best society, no matter what business or calling he may turn his hand to. All the native-born people speak very correctly, the misuse of the unfortunate letter "H," so common in England, being unknown there.

There is no State church in America, all denominations being equally free, and supported by voluntary contributions. The Americans are liberal subscribers, both for building churches and supporting ministers. In Chicago there are two fine cathedrals—the Roman Catholic and Anglican Episcopalian—and hundreds of churches of all denominations, while half a dozen spires may be observed in passing most country towns, so the emigrant need not fear leaving religion behind on going there.

The schools are free, being supported by taxation. They are good and frequent, but attendance is not compulsory. There are many high schools and colleges, so a first-rate education can be obtained, at a trifling cost. Doctors are plentiful all over the country but are not, as a rule, I fancy, very skilful, though they are probably about the equal of the English country practitioner.

Throughout the Western States and Canada, the houses in the country are usually built of wood, sometimes on posts, sometimes on a stone foundation. Only light timbers are used in the frame, the sills seldom exceeding 10 in. square, the lower joists 2 by 10 in., the upper 2 by 8 in., and the scantling and rafters 2 by 4 in. The frame is

usually sheeted with common boards, on which a layer of felt-paper is placed ; over this the siding or weather boards are nailed. The inside may be finished with lath and plaster, or ceiled with hardwood strips, tongued and grooved. I prefer the latter, though slightly more expensive, as plaster in severe climates is apt to fall. Hardwood is also preferable for flooring. The roof is formed of thin parallelograms of pine, overlapping each other, which are called shingles. Such a house, plainly finished, say 30 ft. by 20 ft., two storeys, and containing seven rooms, could be built for 500 dols.

The prices of lumber in Chicago vary according to season and supply ; usually they run about 12 dols. per 1,000 feet superficies for dimension stuff and common boards ; 16 dols. to 18 dols. for siding ; 20 dols. for flooring, and 2 dols. 50 cents per 1,000 for shingles. One thousand shingles will lay ten feet square of roof. The insurance on such a house as I mentioned above would be 10 dols. for a 500 dols. policy, which would be good for five years. In estimating price of lumber in the country, freight from Chicago must be added.

In consequence of the natural features of the land, which in this vast country are often similar for a great number of miles, general farming is not carried on throughout the West to the same extent it is in England, the tendency being for each district to make a specialty of the branch to which it is best suited. For instance, in North-West Indiana are hundreds of square miles suitable only for pasture and hay ; while a hundred miles farther west, in Central and Southern Illinois, the land is peculiarly suited to raising corn, rather than cattle. It would be an expensive business for the Indiana stockman to transport this corn to fat his cattle ; he prefers rather to sell them to a feeder, who takes them down into the corn district, where he buys corn and fats them. Thus we have three different sorts of farmers—the stock-raiser, the feeder, and the corn-raiser,—engaged in the production of beef. Again, the growing of wheat is now largely confined to Minnesota and Dakota, the farmers in the corn-belt finding it more profitable to buy their flour from them there than to raise it themselves ; and in return send the northern farmers hog products,

which they can raise more profitably. All sales in America, both of fat and store stock, are made by actual weight, so that a farmer or dealer does not require so much experience there as in England, where judgment as to weight is required. From these remarks, it will be observed that farming is based on more commercial principles in America than in England.

The transfer of land in America is very simple. Records are kept at the county seat of each county, in which all lands in the county are described, with the name of the holder of the Government patent. No after-sale is binding unless it is entered on this record, so that an intending purchaser can always see by a glance at the records, which are open for public examination, whether the man with whom he is dealing is the *bonâ-fide* owner of the land or not. Nor can there be any incumbrance on the land beyond what may appear on the record, for, to be binding, all mortgages have to be promptly recorded, while any taxes owing which may be a lien on the land always appear on it as well. A mortgage once recorded is a lien on the land till a release from it is also put upon the records,—no number of transfers will invalidate this lien. I will now give a few short remarks on some of the most desirable States in which to settle.

## CHAPTER IV.

## STATES REVIEWED.

ONE great advantage which the Western States and Canadian Provinces offer to the intending settler is, their nearness to Europe, the consequent ease with which they can be reached, and the small expense attending the journey. A person can go there, first class by steamer and rail, for from £14 to £16, or by steerage and emigrant train for less than half this sum. A great saving in first expense is therefore made in going there rather than to any other colony, with the additional advantage that, when the emigrant wants to revisit the old country he can do so at a trifling expenditure of time and money. Knowing this does away, in a great measure, with the feeling of hopeless banishment that one experiences when starting for distant Australia or New Zealand.

Letters come over, too, very quickly, for the mail arrangements are admirable. Postage is  $2\frac{1}{2}$ d. for a letter and 1d. for a newspaper. I take the London *Daily Telegraph*, which I receive, at a point sixty miles from Chicago, often only nine days after date of issue, and certainly on an average within twelve days.

The States east of Ohio, south of the Ohio River, and east of the Mississippi, offer no inducements at all, with the exception perhaps of Kentucky, to any European above the rank of a labouring man. The Bluegrass regions of Kentucky are very rich, and particularly well suited to the raising of blooded stock, either horses or cattle; but land there is high, and to engage in this business requires large capital and great experience; while, even with these, success, without great luck, is seldom obtained.

Virginia is much advertised, but the major part of the good land in this State is exhausted by constant crops of tobacco; labour, too, is not only hard to obtain, but poor and uncertain when obtained.

Orange-growing in Florida has been placed before the

public in a very attractive light, but for many reasons I am sure there is nothing in it, nor is the climate of any of the productive portions of that State at all suited to Europeans. Much English capital has been expended in the purchase of Florida lands, with, I fear, no more chance of making any remunerative return than money invested in Peruvian or Turkish bonds.

Ohio I shall dismiss in a few words, as, though there is much fine land in the State, it is well settled up, and farms are held at a higher price than what more desirable ones can be obtained for farther west. I should never advise the purchase of so-called improved farms if wild land can be obtained, for the Americans make a practice of improving a farm by taking a succession of crops off it, without putting on any manure and, when the yield begins to fail through the consequent exhaustion of the soil, they sell out to some unfortunate foreigner, move west, and take up fresh land.

The same causes as operate in Ohio make Eastern and Southern Indiana undesirable, though in the north-western portion of this State there are some fair tracts still to be obtained at a moderate figure. This section lies rather low, and is consequently somewhat marshy and unsuited for agriculture, but affords fine opportunities to the stock-raiser in particular, and, in a more qualified degree, to hay-men. The State is now expending a considerable sum in improving the drainage of these lands, which, from their proximity to Chicago, are sure to increase in value. Indeed, I know of no portion of the Union where land can be purchased with a greater certainty of a large and rapid rise in price. The numerous rivers and shallow lakes of this region afford splendid fishing and wild-fowl shooting, while the climate is well suited to English people.

In the summer months—June, July, and August—the sun has certainly considerable power, though the temperature is seldom above 90 degs. in the shade. The nights are usually cool and pleasant, while the fresh breeze, blowing throughout the day, much modifies the heat. In April, May, September, and October, the weather is always very pleasant, and generally settled, the temperature being much the same as early summer in England. March and November

are usually wet, rough months. December, January, and February are pretty cold, the thermometer sometimes indicating 20 to 25 degs. below zero. This intense cold is not, however, so much felt as a much less degree is in England, for the atmosphere is very dry, and most of the time the sun, which has considerable power even during winter in this latitude, is shining brightly. Unless a high wind is blowing, a zero day is not at all unpleasant. But little snow falls through this section, and if they are afforded some shelter, either by timber or buildings, stock do not suffer from the cold. These remarks as to climate apply equally to Northern and Central Illinois, Iowa, and Nebraska, though in the latter State the rainfall is less.

Indiana is the first State in which we come across open prairie land, which is here interspersed with timbered tracts, the open land becoming more frequent as you advance west. In the part I have alluded to above, about 75 per cent of the land is open, the timber being very evenly distributed in small groves and ridges, which gives the country a beautifully park-like appearance. The timber on the high ground consists of several species of oak, while in the river bottoms ash, maple, elm, and birch abound.

In the marshier parts there is some fever and ague, but a judicious use of quinine will always prevent this from troubling. Taken altogether, I know of no part which offers more attractions to any one wishing to purchase land, especially if he has any taste for field sports, while its proximity to Chicago enables him to enjoy all the advantages of advanced civilisation.

Good grass land costs through this section 7 dols. 50 cents to 12 dols. 50 cents per acre, and can be rented from speculators who are holding for a rise in price for from 50 cents to 75 cents per acre.

Northern and Central Illinois consists of some of the finest land in the world for the production of cereals, with the exception of a narrow strip in the north-east corner, which joins on, and resembles in natural features, the region alluded to above. The remaining portion consists of gently-undulating prairie, having little or no timber, except of artificial growth. The soil is a fine vegetable loam, with clay or limestone subsoil. It is very easily worked, and is entirely

free from stones. It is particularly suited to the production of Indian corn (maize), which is the principal crop raised throughout the district. Improved farms are held at from 40 dols. to 50 dols. per acre. Most of the land has been brought under cultivation, but some wild land can still be obtained at from 20 dols. to 30 dols. per acre. Cash rents run from 3 dols. to 5 dols. There are plenty of railroads running through it, and the wagon-roads, except in early spring, are fair.

Crossing the Mississippi, we strike the State of Iowa, lying due west of this portion of Illinois, which it much resembles in natural features and climate, but contains a much greater amount of good land that has not yet been brought into cultivation; this can be bought for from 10 dols. to 15 dols. per acre. The relative value of land of equal productiveness throughout this region must, of course, be determined by the cost of transporting its produce to Chicago, which is its market for all surplus grain and stock. Taking the mean cost through Northern and Central Illinois at 4 cents a bushel for corn and through Iowa at 6 cents, with the average crop in both States thirty-three bushels per acre, we have a yearly tax for transportation on an Iowa acre above Illinois of 66 cents; capitalising this, allowing 6 per cent. interest, we find the average value of the Illinois acre to be about 11 dols. more than the Iowa one. The tendency, however, is to reduce the rates of freight, which will, of course, tend to approximate their values; I therefore regard land in Iowa as a better investment than in Illinois. Another reason for giving Iowa the preference is, that it possesses more unimproved land, which gives the buyer a greater choice when making his selection.

Nebraska is likewise a good corn country, though not quite equal to Iowa, as its climate is dryer; this fault will be remedied as the cultivated area is extended and more trees are planted. Land in this State in its natural condition is worth from 5 dols. to 10 dols. per acre, and a large proportion is still uncultivated; still, I shall take Iowa as the State which at present offers the greatest inducements to the corn-grower.

The next group, whose climates and natural features are nearly the same, consists of Southern Illinois, Missouri, and

Kansas. The average temperature of this region is some 10 degs. above that of the group we have just done with, and spring commences a month earlier. The winters, however, judged by the English standard, are pretty cold; but, as 10 degs. less of cold on a way below zero day do not make so much difference in their favour as the greater heat and longer duration of the summer militates against them, I look upon the climate of the former as rather less desirable than that of the latter. There is a large amount of fine land, however, in both Kansas and Northern Missouri that can be bought well within its value, and they undoubtedly offer great advantages to an intending settler. This district is mainly dependent on St. Louis as a market for its surplus produce.

These States (Indiana, Illinois, Iowa, Kansas, and Nebraska) comprise the great corn (maize)-producing belt of the northern continent; nowhere else in the world can it be grown so cheaply or of so fine a quality. The demand for maize as a food and for various manufacturing purposes (whisky, starch, glucose, &c.) is continually increasing, but, when the land in these States is all brought into cultivation, the area of its profitable production cannot be much farther extended; the amount to be produced being thus limited, the value of corn will certainly rise, and with it the value of the land capable of producing it. It is a fact that, through the present depression in all other cereals, corn has almost, if not quite, held its own.

On the contrary, wheat can be produced profitably over a very much more extended area, if only transportation facilities are afforded. From this it is apparent that an investment in good corn land is more likely to be made profitable at an early date by a large advance in value than one in wheat land.

Michigan and Wisconsin are heavily-timbered States, possessing large quantities of soft pine; their climate is similar to that of Northern Illinois, with the exception that more snow falls during the winter. Southern Michigan produces very fine fruits, the raising of which can be profitably carried on, and sheep do well in both States; but they offer no special inducements to any other class of farmers. There are many chances in them, however, for

men to engage in the various branches of the lumber trade, which is their main industry.

Minnesota and the territory of Dakota are the best wheat-producing regions of the States; their climate is considerably colder than in the more southerly States, the frost usually remaining in the ground from early November to the middle of April; during the greater part of this time the ground is deeply covered with snow. The summer days are very warm, but the cool nights render corn (maize) growing hazardous, so that this section does not offer much attraction to stockmen. Undoubtedly, a good living can be made in them by a wheat or general farmer; but to such a man the British territory immediately joining them offers much greater inducements, and has no more serious drawbacks.

Portions of New Mexico are favourable for breeding thoroughbred horses and cattle, as the climate and grasses are well suited to tender young stock, but most of the territory is too dry for successful cultivation.

The State of Oregon and Washington Territory have a splendid climate, more nearly resembling England, in not having any extremes of heat and cold, than that of any other portion of America. They are, however, very far removed from England, and the journey to them is an expensive one. The cost of transporting a large family there would go far towards starting them fairly in some of the more eastern States. The same will apply to California, which has a magnificently dry and bright climate, and produces abundantly the finest fruits. All the *good* land in this State is held at prices quite beyond the reach of a man of moderate capital, while the prices of most necessaries are higher than on the other side the Rockies.

The remaining territories do not, at present, offer any very tempting chances to the majority of intending settlers, their chief industries being mining and cattle-ranching; though the Mormons have succeeded, by great industry, in developing parts of Utah, which were once considered desert, into a charming country.

Texas, by far the largest State in the Union, has been largely advertised; but, from its hot and dry climate, it is unsuited to any agricultural business except cattle-ranching,

and that, for reasons given later, I do not look on with at all a favourable eye.

Canada proper is well settled up, and land there, considering its quality, is dear, so I shall say nothing about it; but Manitoba and the other North-Western Provinces of the Dominion I must discuss at some length, both now and later on, when I go into wheat-farming.

Owing to the opening of the Canada Pacific Railroad, which is now in running order from Port Arthur to the summit of the Rockies, over a thousand miles, all this great territory has been placed within cheap and easy reach of England, though, from the fineness of its waterways, it can never be at the mercy of this or any other railroad with regard to freight-rates. The soil of these provinces is infinitely more fertile than that of the United States. In consequence of this and a rule of Nature, that the nearer it approaches to the northern boundary of its successful cultivation the larger is the yield and the better the quality of any cereal, the average yield of wheat, barley, and oats is much greater, and its quality better, than there. The climate is delightfully healthy, for, though during the winter the thermometer stands very low, the air is dry and the weather settled, never affording the discomforts of continual freezings and thawings which frequently cause so much loss and inconvenience when one gets farther south. Every one who has passed a winter on the British side of the boundary-line will agree that the steady, dry cold, though according to the thermometer intense, is not so disagreeable as a raw day in England, even with the thermometer above the freezing-point.

All winter through the ground is covered with snow, which is very beneficial to the soil, though it renders the housing of stock advisable: as building materials are cheap, this is a small drawback, when the superior qualities and cheapness of the hay and grain are considered. There is an abundant supply of water, easy to be obtained in all parts. The native grasses are very nutritious, and start so quickly in the spring that they afford good pasturage almost before the frost is fairly out of the ground, so that the necessity for feeding-hay is at an end as soon as in the cattle States, where the grasses, being of a less hardy

nature, require the ground to be warmer before they start. Little rain falls during spring and summer, but the warm days and cool nights cause abundant dews, which keep the pastures always green and growing.

For the production of wheat, barley, oats, roots, most vegetables, and small fruits, this country is unsurpassed by any in the world ; in consequence, its rapid settlement is an assured fact, so that land there, bought at its present low price, cannot fail to be worth two or three hundred per cent. more in the immediate future.

Like the land in the States, these provinces are surveyed in townships of six miles square ; these are subdivided into thirty-six sections, or square miles, of 640 acres each, which are numbered as under :—

N						
W	31	32	33	34	35	36
	30	29	28	27	26	25
	19	20	21	22	23	24
	18	17	16	15	14	13
	7	8	9	10	11	12
	6	5	4	3	2	1

S

E

The Canadian Pacific road originally owned every alternate section, except 11 and 29, for twenty-four miles on each side of the line, but they have sold Nos. 1, 9, 13, 21, 25, 33, on the main line, to the Canada North-West Land Company ; Nos. 8 and 26 in each town are owned by the Hudson's Bay Company ; Nos. 11 and 29 are set apart to be sold to settlers at a future day, the money derived from such sale to be devoted to building and maintaining schools ; and the remainder belongs to the Government of the Dominion. With exceptions mentioned above, the Canadian Pacific have still in their possession the greater

part of the land conceded to them, which it is to their interest to dispose of to actual settlers on very advantageous terms, as every fresh acre brought under cultivation adds to their traffic returns. More detailed information as to their land, and its price per acre, can be obtained by applying to Alex. Begg, Esq., 89, Cannon Street, E.C.

The remarks and descriptions in the preceding four chapters will, I hope, have given the reader a sufficiently clear idea of the surroundings to follow me in my discussion of some of the businesses he may enter upon, which I shall now commence. The first business I touch on is well suited to a married man, as it can best be carried on in a small town.

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## CHAPTER V.

### HAY-DEALING.

THIS is a business the necessary experience for which can readily be picked up in a short time. It can be carried on successfully on a capital of £600, though in this, as in most other businesses on which I shall touch, more capital will bring in larger profits in proportion. My object in these notes is, however, to show the minimum capital with which a business can be conducted with fair prospects of success. There are two distinct sorts of hay dealt in in America : hay grown on cultivated land, and known as "tame" ; and hay produced from the natural grasses grown on unbroken soil, and known as "wild" or "prairie."

Tame hay is divided into three grades, or qualities :—No. 1 TIMOTHY,\* consisting of almost pure timothy in good condition and of good colour ; No. 2 TIMOTHY, timothy somewhat mixed with clover or other grasses ; and MIXED,

\* "Timothy," which is very similar to what is known in England as meadow foxtail, is one of the most valuable of the seed grasses.

which may be clover with some timothy, or any other cultivated grasses, such as red-top or orchard-grass.

Wild hay is divided into UPLAND, very fine short grass, grown only on high lands. Very little of this is produced in the more settled States, most of the supply coming from Iowa and Nebraska. It commands as high a price as No. 1 timothy, but has to come so far to market that the freight generally eats up most of the profit. As handling this hay is rather a risky business, I shall leave it out of my calculations altogether.

The second grade of wild hay is No. 1 PRAIRIE. This consists of somewhat coarse grass grown on tolerably low lands, pressed in good condition, and of good colours. No. 2 PRAIRIE is coarse grass grown on lands subject to overflow, or No. 1 that has been rained on, heated in stack, or for any reason is off colour. This is only used for packing, and feeding to cattle in distilleries ; but the demand for it is good during the winter months — Peoria, about 160 miles from Chicago, consuming alone some 30,000 tons annually.

In the neighbourhood of many large American cities no hay at all is produced, while many others cannot draw a sufficient supply of loose hay from the country immediately tributary to them ; these cities are mostly increasing rapidly, consequently the market for baled hay is every year becoming more extended.

Hay is not shipped by rail in America in the truss as it is in England, but in tightly-pressed bales ; as these enable a larger quantity to be shipped in the car, and thus reduce the cost of transportation.

The usual course pursued is for the hay-dealer to build a convenient barn in some suitable location, preferably on the line of some railroad ; to place in it such a press as he may deem most suited to his requirements, and then buy whatever hay is drawn in to him. In connexion with the barn is a small office, in front of which are wagon-scales ; here the hay is weighed as it is drawn in, and then unloaded in that part of the barn containing hay of the same sort and quality.

If a good location has been selected, the farmers round may be depended on to draw in enough hay to keep a

steam-press running the year round, without the dealer having to go into the country in search of it. In a conspicuous place in his office he keeps a list of prices given, which will, of course, vary according to the markets and his requirements.

There are several sorts of presses manufactured, but the Dedricks are so far superior at present to all others, both in cheapness and in the superior selling qualities of the bales they make, that I shall confine my remarks to them. The Dedrick steam-press, which is most suited for barn work, requires a six-horse engine and five men to run it; its capacity is 12 to 15 tons per diem, and its cost about 400 dols. The Dedrick four-horse press, more suited to outdoor work, requires four horses, three men, and a boy; this has a capacity of 7 to 9 tons, and costs, including power, also about 400 dols. The size of bale made by both these presses is 30 x 14 x 18 inches, weighing from 100 to 115 lb.

Dedrick also manufactures a two-horse press, but the bales from this, being larger, are not so salable nor so easily carried, so I do not recommend it, as it is important when producing anything for sale to have it in the most attractive form for buyers. When the hay is pressed, it is loaded in box-cars, holding from 8 to 12 tons each, according to size of car, density of bale, and care exercised in loading. Any fair car should hold at least 10 tons. An American ton is 2,000 lb.

It is usual for railroads to charge on car-lots for a minimum of 10 tons, with extra charge at same rate for any excess in weight. Rates, which are much lower than in England, are quoted on a basis of 100 lb.; for example, if the rate per car-load from Chicago to Cincinnati was inquired for, the answer would be, "15 cents per hundred pounds"; that is, 3 dols. per ton, or 30 dols. per car. A car containing only 8 tons would still be charged 30 dols., while one holding 12 tons would have to pay 36 dols. When the hay is loaded in the car, it may be disposed of in several ways. There are in all the big cities wholesale dealers, who are ready to take the hay on track at point of production—the seller, of course, guaranteeing that the whole car is of the stated grade, and making good any loss that

may occur in freight through the car not containing the minimum amount. This, if the seller's standing is known, is generally a cash transaction, he drawing on the buyer for the amount as soon as the car is sent off. Another way is to send the hay to a commission agent in some of the large centres, where he will dispose of it for a commission of 50 cents per ton : this is, perhaps, the most satisfactory way of doing business for a beginner, for no dispute can then arise as to grades and freights. Care must be exercised in selecting an agent, and in having the car loaded with the same quality of hay throughout. Messrs. G. S. Blakeslee & Co., 1,537, State Street, are the best in Chicago : the senior partner, Mr. G. Blakeslee, will always be found ready to give any information to inquirers. It is usual for commission agents to pay freight at point of arrival, and to allow a draft of some two-thirds the home value of the consignment ; settling balances monthly or quarterly, as may be agreed on.

As I remarked before, it would be a suicidal policy for any young man to go direct from England and engage in the hay or any other business. He should go for at least six months to some hay-man, and learn the tricks of the trade. If he has any business capacity, this time should be ample to master them. He can then commence to cast round for a location to start for himself. This should not take him long to find, as new railroads, developing fresh countries, are being continually opened. Having selected a suitable locality, I should advise him to go and stay there for at least a month, to make sure it is all he has thought it before finally settling ; then, if satisfied, he can commence operations. With a small capital expensive buildings are not desirable : a suitable barn, capable of holding 100 tons of loose hay, can be built for £125. A press and light six-horse engine will cost £200 ; an office and weighing-table another £25 ; the land necessary can always be obtained from the railroad company at a merely nominal rent. His total expenditure has now been £350, leaving him with a balance in bank of £250, or at present rate of exchange 1,220 dols., which I shall presently show is ample for his needs. In all my examples on businesses, I shall take Chicago as the market, on the prices of which

I shall base my calculations ; for, though possibly not the best hay market for all grades, Chicago is most decidedly the best all-round representative market on the continent ; while its rapid growth assures any one going into business in connexion with it a constantly-extending field of operations. We will, therefore, suppose the location decided on is situated somewhere about 100 miles from Chicago, at which distance the freight will be in the neighbourhood of 6 cents per hundred, or 12 dols. per car, at which figure we will then take it in our calculations.

I may here again remark that, of course, the price of articles in the country is mainly governed by the cost of transportation to the market to which the district is tributary. We will also take it for granted that the new beginner intends to send his stuff to a commission agent.

The amount, 1,220 dols., which he has now left in bank does not seem large, but, as I mentioned before,—and as I explain at greater length in my notes on banking and credits,—when shipping to a commission agent, as soon as the car is loaded you go to the station-agent (*Anglice*, station-master) and get a bill of lading ; billing the car to your own order in Chicago, with instructions to notify your commission agent on its arrival—of course, appending his address. This bill of lading you endorse, and take to the bank, where you attach to it a draft for such proportion of the value of the consignment as may have been agreed on ; these are forwarded by the banker to his agents in Chicago ; they notify your agent, who sends round, pays the draft, and obtains the bill of lading, without which the railroad company will not deliver him the car. The money is then remitted to your account at your bank. This is an admirable safeguard when dealing with strangers. Should you be short of money, your banker will readily discount such a draft for a small percentage.

By this means you get the returns for two-thirds the value of your merchandise in a few days at farthest, and are thus enabled to work on quite a limited capital.

A fair average price for hay in Chicago is—

				Dols.
No. 1 Timothy	...	...	...	12'00
," 2 "	...	...	...	10'50
Mixed	...	...	...	9'00
Upland, choice	...	...	...	12'00
fair	...	...	...	10'00
No. 1 Prairie	...	...	...	8'00
," 2 "	...	...	...	6'50

These prices are, of course, subject to fluctuations, No. 1 timothy selling sometimes as low as 10 dols., at other times rising to 15 dols. and over, with the other grades in proportion. These fluctuations are caused by the crops and the season of the year. In winter months, when the roads are frozen hard and farmers have most leisure, hay is delivered freely, and prices, unless the crop is short, generally decline. During the spring and early summer, when roads are bad and farmers busy, receipts fall off and prices stiffen—May almost invariably affording the best market of the year.

This is to the advantage of the dealer, as, though prices in the country fluctuate with those in Chicago, he should always lay by as much of his best hay, as his circumstances will allow, for the rise in price sure to occur at this time.

In such a business as I am describing, the average monthly receipt from farmers would be about 200 tons, of all grades, except in April and May, when they would probably be little or nothing; neither would they be very heavy in June or July, but increased receipts during the winter months would about balance this, and bring up the yearly total to something over 2,000 tons. The price he would give would, of course, be in a measure influenced by the deliveries and number of orders he might have on hand; but, at such a distance from Chicago as we have taken, it would generally rule, for loose hay, at 4 dols. 50 cents to 5 dols. below the price for baled hay there. For the purpose of our example we will take the former figure. For other distances, calculate 3 dols. 30 cents to 3 dols. 80 cents, in addition to freight to Chicago.

The hay delivered would largely consist of No. 2 timothy

and No. 1 prairie; No. 1 timothy is scarce, while little or no upland is obtainable in this locality.

Basing our calculations, therefore, on the figures given above, we may assume that the average value per ton of loose hay at the barn is some 5 dols. Taking a mean between No. 2 timothy at 6 dols. and No. 1 prairie at 3 dols. 50 cents, and estimating the receipts of timothy to be somewhat the larger, this will make the average monthly amount to be paid out for hay 1,000 dols. The cost of pressing hay will, of course, vary according to the quality of the hands employed, and the capacity of their employer to get work out of them. Under favourable circumstances, hay can be pressed for 1 dol. 35 cents per ton; want of experience may run the cost up to 1 dol. 70 cents. I should say that 1 dol. 50 cents per ton might be taken as a fair average; there will then have to be paid out in wire, wages for pressing, coal, &c., some 300 dols. on this 200 tons.

In loading the cars, there is further need for skill on the part of the men and supervision by their employer. A Dedrick steam-press should load at least 10 tons in any ordinary car, at a cost for labour of 1 dol. per car.

If care is not exercised in packing away the bales and diligence in saving time, the car-load may be reduced to 9 or even  $8\frac{1}{2}$  tons, while the cost may be increased to 1 dol. 50 cents for labour. Putting the shipments for the first month at 150 tons, we will call the amount for carring 20 dols. Allowing a draft of 5 dols. per ton on this amount shipped, we have the following balance at end of first month:—

	Dols.		Dols.
Paid for hay ...	1,000	Capital left ...	1,220
"  pressing ...	300	Received during month	
"  carring ...	20	on drafts ...	750
"  collecting			
"  drafts ...	4		
"  repairs ...	10		
Balance in hand ...	636		
	1,970		1,970

At the end of the second month, during which 200 tons will be shipped, we have a balance-sheet :—

	Dols.		Dols.
Paid for hay ...	1,000	Balance last month ...	636
"    pressing ...	300	Received on drafts	
"    carring ...	25	during month ...	1,000
"    collecting			
"    drafts ...	5		
"    repairs ...	10		
Balance in hand ...	296		
	<hr/>		<hr/>
	1,636		1,636

By this time cheques from the commission agents for the monthly balances over the drafts will begin to come in, so it may be seen that my estimate of the capital necessary for carrying on such a business is not too low.

Let us now look into the probable profit to be derived from these operations, placing the cost of pressing, &c., at—

	Dols.	Dols.
Pressing ...	...	1'35 to 1'70 per ton.
Carring ...	...	10 " 15 "
Freight { according to amount in car	...	1'20 " 1'40 "
Commission ...	...	50 50 "
Total ...	...	3'15 3'75

This leaves, at a margin of 4 dols. 50 cents per ton, a profit of from 75 cents to 1 dol. 35 cents, according to the amount of care and skill exercised. With the use of an ordinary amount of common sense and diligence, this profit should certainly average 1 dol. per ton, giving a total income beyond cost of production on an annual turnover of 2,000 tons of baled hay, of—

	Dols.
	<u>2,000</u>
Deduct repairs ... ... ...	120
" insurance ... ... ...	25
" taxes... ... ...	30
" charges on bank account ...	60
Leaving total profit ...	<u>1,765</u>

With care in curtailing living expenses, part of this should be annually turned in, to increase his capital, and enable him to hold hay for favourable markets. After a time, too, he would gain experience enough to be enabled to dispose of his hay himself to consumers and retail dealers, which would save him at the least 50 cents per ton commission. Many customers like to contract for so much the week or month the year through; in this way a well-informed man, able to look ahead, can often strike a good thing, so that ultimately his profits should be very largely increased.

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## CHAPTER VI.

### STOCK-FARMING.

**T**HIS business, though not so profitable, in comparison to the amount of capital it takes, as some others, is a very easy and safe one, requiring but little hard work of any sort, and entailing few annoyances or worries on any one going into it. There are no indications that cattle will ever rule lower than they do now; in fact, as the facilities for transportation are improved, a gradual rise in their price may be confidently looked for. During the winter the owner should exercise constant supervision over his stock;

but the rest of the year, with the exception of haying time, he can remain in comparative idleness ; though time need never lay heavy on his hands, for good stock-farms are always in the neighbourhood of rivers and marshes, which, during the spring and autumn, afford splendid wild-fowl shooting, while, in the former, quantities of fine fish may be caught during the summer months. Fat cattle and feeders are always in strong demand, so he can make sure of a fair price and ready sale for any stock he has to dispose of, without moving them off the farm. I consider this business admirably suited to retired officers of the army or navy, for it requires but little previous experience.

As meat, vegetables, poultry, butter, eggs, &c., will be produced on the farm, the annual expenses should be light. Before attempting to commence, a month or two should be passed in the neighbourhood selected, and some reliable man hired to accompany and advise the intending farmer in his selection of land and stock. If he then hires for his yearly hand some good man used to the care of cattle, he should be able to get along all right.

In Northern Indiana and North-western Illinois, within from sixty to a hundred miles of Chicago, are large tracts of land, which can be bought for a comparatively small sum, and which are peculiarly well suited to stock-raising.

This land consists of small, flat, and somewhat low-lying prairies, intermixed with ridges and small hills ; these higher lands are of a very sandy nature, and will not produce good crops without lots of manure ; as the stock-raiser will have plenty of this, he can successfully farm from twenty to thirty acres. The high ground is usually covered with a spare growth of timber, which is easily cleared off, and averages from 10 to 20 per cent. of the land. It only affords about half the amount of pasturage that the prairie does, but gives a welcome shelter for the cattle in hot and windy weather. The prairie land is rich, but lies too low for successful cultivation except in a dry season ; it produces very fine pasture and fair hay. The soil consists of a black sandy loam.

For a man with £2,000, a section (square mile) of this land will make a very handy stock-farm. A good one can be bought in its natural state for 10 dols. per acre,

or 6,400 dols. If 1,500 dols. of this is paid down, the remainder can stand for a term of years at 6 per cent. interest, or can be so arranged as to be paid off in yearly instalments.

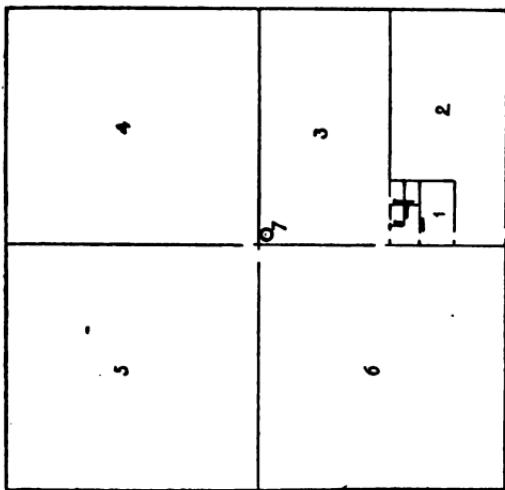
A suitable section of land having been chosen, it can most conveniently be divided into four square fields of 160 acres each. The one of these containing the largest amount of timber may then be divided into two fields of eighty acres each, in one of which the house and yards should be placed, as near the annexed plan as the nature of the ground will permit. In the yards and the intersection of the pasture-fence windmills, pumps, and tanks for watering should be placed (see Plan).

To inclose and divide a section thus will take 6½ miles of fencing. The best cattle fence is three barbed wires, with a post every rod; this will cost, including labour of putting up, 30 cents a rod, or 624 dols.

A very comfortable wooden house can be built for 500 dols.; yards, sheds, and stabling will cost another 500 dols. One work-team will be required, cost 200 dols.; a lighter team for driving, riding, and general utility purposes, cost 150 dols.; also a buggy, 100 dols.; two sets of harness, 60 dols.; and a wagon, 60 dols.; some cows for house use, a few hogs, and some other things I have enumerated at length in my capital estimate. Strong, plain household furniture should not cost over 250 dols. For further remarks on the buildings, &c., see page 25.

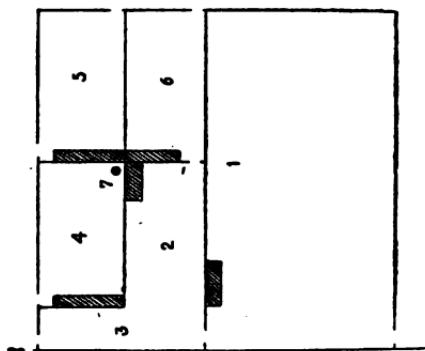
The buildings should, if possible, be furnished, and everything in order by May 1, when stocking-up should commence. One of the 160-acre fields, as well as the 40 acres left over in the 80 in which the house, yards, and cultivated land are situated, must be reserved for hay; this leaves us with two pastures of 160 acres each and the home-pasture of 80 acres; this, with the after-grass on the hay land, will be sufficient to summer 225 cattle of mixed ages. The first year we shall only have 150 head, but afterwards the farm will be stocked to its full capacity.

Early in May, 75 two-year-old steers and 75 yearlings should be purchased, and in the following September 75 calves, which can be run till winter in the 80 acres sur-

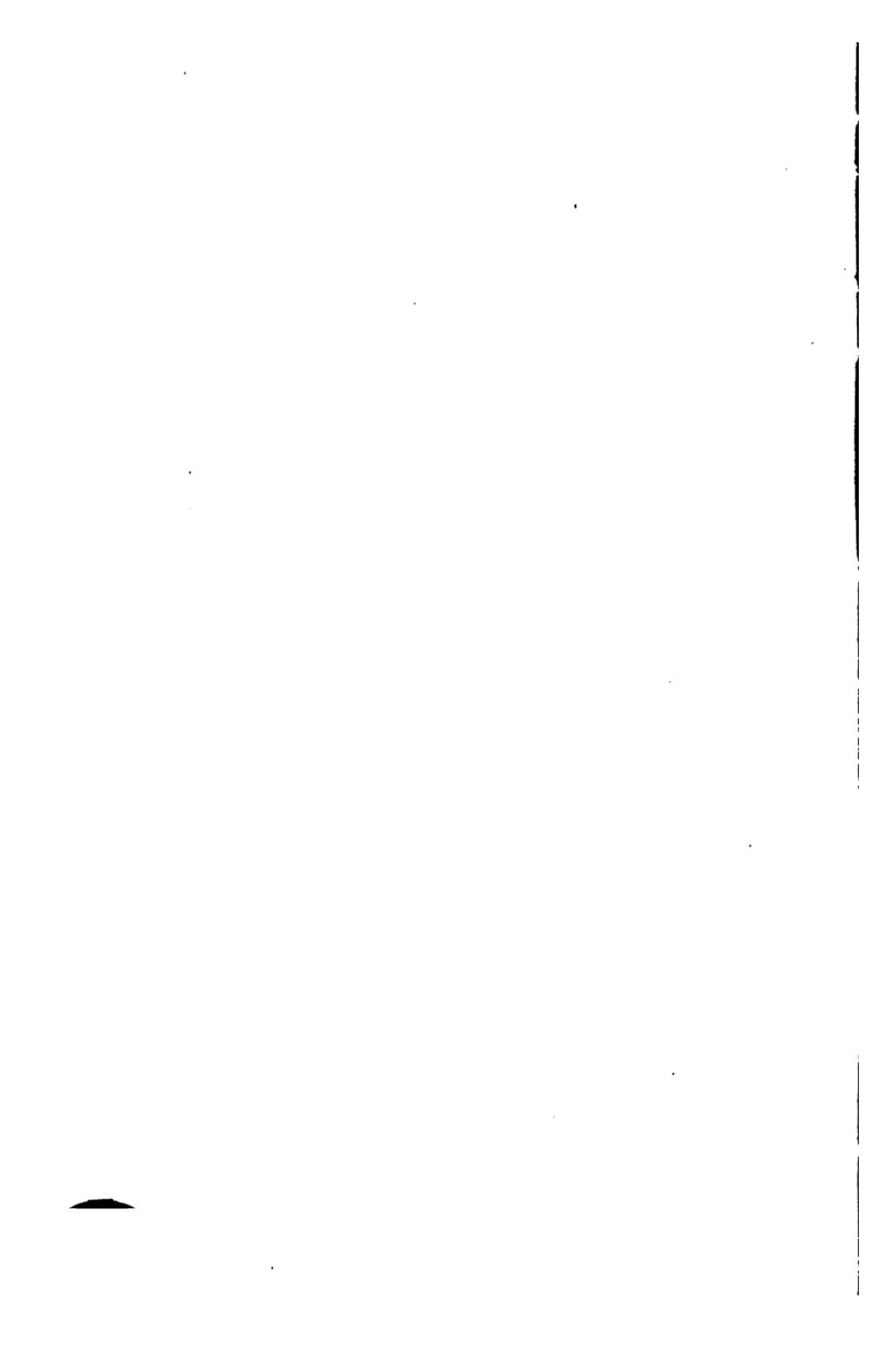


1. House and garden.
2. Cultivated and hay land.
3. Home pasture, 80 acres.
4. Pasture, 160 acres.
5. Ditto, 160 acres.
6. Ditto, 160 acres.
7. Windmill-pump.

[face p. 46.



1. House and garden.
2. Stable and stable-yard.
3. Road.
4. Cattle-yard.
5. Ditto.
6. Calf-yard.
7. Windmill-pump.



rounding the house and yards. These will cost, at their respective buying times—two-year-olds, good, 28 dols. per head, yearlings 15 dols., and calves 10 dols. Of course, the prices of store cattle fluctuate in accordance with those of fat. The above, however, are the prices now ruling in the district I have selected to illustrate.

There are numbers of small farmers through this region, each keeping a few cows, the calves from which they sell every autumn in order to provide their stores for the winter, so that a supply of calves is easy to obtain: older cattle are not so easy to find, but it is only in the first season we shall be troubled to hunt for them.

As before any of the stock I have supposed to be purchased will be fit for market a year and a half,—that is, to the end of the following September but one,—has to elapse, the stock-farmer must lay aside a portion of his capital to meet the outgoings for this time; we have, therefore, the following estimate of capital required:—

	Dols.
Payment on land ... ... ...	1,500
Fencing ... ... ...	624
House ... ... ...	500
Furniture ... ... ...	250
Yards, sheds, stables ... ... ...	500
Horses, two teams ... ... ...	350
Buggy 100 dols., wagon 60, harness 60	220
Cultivator 20 dols., plough 12, drag 8	40
Mower 60 dols., rake 25 ... ...	85
Two windmill-pumps 160 dols., tanks 40 ... ... ...	200
Two cows 60 dols., hogs, poultry, &c., 30 ... ... ...	90
Cattle, two-year-olds, 75 at 28 dols. per head ... ... ...	2,100
„ one-year-olds, 75 at 15 dols. per head ... ... ...	1,125
„ calves, 75 at 10 dols. per head	750
Reserve for outgoing expenses ...	<u>1,346</u>
 Total ... ...	 9,680, or £2,000.

Through the grazing districts, most of the cattle are wintered on hay alone. This is a bad policy, as the winter is so long that they tire of hay, and towards spring-time begin to fall away rapidly; through December and January, though cold months, the older cattle hold their own pretty well on hay, but from then till grass they should have a fair ration of corn, which will bring them out in fine condition in the spring. I have estimated this to be fed from February 7, but if the cattle begin to fall off earlier a small ration should at once be given. My estimate, however, of the amount of food required during the season is ample, as in this case less per diem can be fed, so that the amount actually consumed will be about the same. The calves should all along be fed on something besides hay.

By the first week in April there is generally grass in the timber, but in late springs hay will have to be fed in conjunction with it a week or two longer, so I have allowed some little over the actual amount consumed to that date. There will be considerable feed in the corn-stalks on the cultivated land, into which the weaker cattle should be turned; these should add another twenty tons to the reserve of hay.

It is best to run the cattle at first in the 80-acre home-pasture. When that is fed pretty close, move them into one of the 160 acres, and from this into the other; by the time this is exhausted there will be a good bite on the after-math, from whence they may return to the home-pasture about the middle of October, letting them now have free access to the yards, if they choose to shelter in them. In ordinary years hay has to be fed about the middle of November.

The calves as they are bought can be turned into the 40-acre after-math. An early winter is generally succeeded by an early spring. From mid-November to end of first week in February, the two-year-olds will each eat and waste 25 lb. of hay per diem, the yearlings about 20 lb., which, for the whole time, will amount to 140 tons. They will not now want quite as much, as they have corn in addition, but during the remaining time will use about 75 tons. During the winter the calves will need about 50 tons;

adding 12 tons for milch-cows and horses, we have a total of 277 tons; allowing for a few days' extra feeding, let us say 300 tons.

The 200 acres reserved for hay should, in ordinary years, turn off this amount of good cattle-hay, but in a dry season the stock-farmer may have to hire a little extra hay-ground, which is always to be obtained in the neighbourhood for about 50 cents per acre. This hay can either be put up by contract for 1 dol. 50 cents per ton, or he can hire hands and teams, and put it up for himself; in any case, he should put up some himself to employ his hand and teams, which will be idle at this season. By so doing he should be able to get back half the hand's annual wages, while the surplus of corn from the cultivated land, beyond what is required for the teams, hogs, &c., can be used for the cattle, and should more than pay the other half of his wages. So, in estimating the annual expenses, I shall leave out this item, and only include a boy to look after and feed the calves during the winter, at a wage of 50 dols.

In fine weather the hay may be scattered from the wagon over the home-pasture or arable land, when the cattle will readily pick it up. In the yards, besides ample sheds, long racks should be built, which should always be kept well filled in readiness for storms. The corn can likewise be strewed on the ground, as the cattle will pick it up and eat it, cob and all. When yarded, the cattle of the same age should always be placed together, or the larger ones will keep the smaller from getting a supply of food and water. It is better to salt the hay as it is stacked.

From February 7 to April 7, 6 lb. per day of corn for the two-year-olds and 4 lb. for the yearlings will be an ample ration; or, if oil-cake is used, one-half this quantity: this, for the sixty days, will be 45,000 lb. (650 bushels of 70 lb.) of corn, or 11 tons of linseed. Corn fluctuates in price much according to the crops; but when high, cattle are high in proportion. At the price I am estimating cattle, corn would rule about 35 cents in the country, but, as it might have to be brought some distance, we will estimate the price delivered at 40 cents per bushel. Oil-cake is worth about 25 dols. per ton in bulk on the car, or 27 dols.

in bags; if the bags are returned, it will rule, with return charges, about 26 dols. per ton, so that the cost of winter feed will be:—

				Dols.
Hay, 500 tons	...	...	...	450
Corn, 1,050 tons	...	...	...	420
Total	...	...	...	870

If linseed-cake is used, this will come to 918 dols.; but I prefer corn for the older cattle, as it is easier fed; though a slop made from ground cake, which can be obtained at same price as whole, is preferable, for the calves. Using this would make the price of food about 900 dols. I omitted to state that the ration for calves should be 2 lb. of corn, or 1 lb. of linseed, per diem up to February; 3 lb. corn, or 1½ lb. linseed, after that, which will make 400 bushels of corn, or 7 tons linseed; this amount I have included in the above estimate. An ordinary ear of corn will weigh about half a pound; so, if it is necessary to feed any of the animals separately, it is easy to apportion their ration. When feeding a large bunch, the number of bushels to give a ration each is measured out and scattered over the yard, and each must take its chance of getting its share. If the owner notices any animals who, through weakness or cowardice, do not get their share, they should be removed and fed separately.

During the summer the cattle require no looking after, but salting once a week, as the windmill-pump keeps them supplied with water. During winter, one man and a boy, assisted occasionally by the owner, can well take care of the stock. The man should be hired by the year, for 200 dols. per annum and board; but, for reasons I explained before, I do not include him in my estimate of annual expenses. The boy can be hired for the winter months for 50 dols.

I have allowed for five per cent. of cost of animals to be put aside annually as an insurance fund; as American cattle are very healthy and hardy, and any mortality that occurs is almost sure to be among the calves and yearlings, the older cattle seldom dying, this will be ample.

I have also calculated five per cent. per annum on cost for repairs to buildings and fences. This will not be required for the first few years, during which time a fund should be accumulated sufficient to keep them as good as when first erected. The barbed wire on the fences will last a long time, but the posts require renewing every six or seven years. They can be bought, ready sharpened and delivered, throughout this section, for six cents ; or the man can manufacture them out of the timber on the land in spare times. If replaced gradually, the owner and his hand should be able to do the necessary work to keep the fences in thorough repair. We will now turn to the average profit which should accrue.

It is much easier to move cattle some distance to corn than corn to cattle ; so, as but little is raised in or near the pasture district, no cattle are corn-fed there, but they are sold in the autumn, after they are three years old, to feeders and distillers, who are always ready to take all that can be obtained. The fattest, however, are sold, off grass, to butchers and shippers. With cattle wintered as I have described, by the end of September at least two car-loads (thirty-two) out of seventy-five head would be fit for this purpose. These should average 1,300 lb., and would bring on the place  $4\frac{1}{4}$  cents per lb., or 61 dols. 75 cents per head ; on the two car-loads this would be 1,976 dols.

The remaining forty-three should average 1,150 lb. each, and should bring as feeders  $4\frac{1}{4}$  cents per lb. on the place, that is, 49 dols. per head, or 2,107 dols. for the bunch ; making total receipts 4,083 dols. By this time the yearlings first bought would be two-year-olds, and the calves yearlings ; so, in order to bring up the stock to the original strength, only seventy-five calves would have to be purchased, at a cost of 750 dols.

For winter's keep, 900 dols. would have been expended for labour, &c., as follows :—

	Dols.		Dols.
Seventy-five calves ...	750	Received for thirty-two	
Winter's keep ...	900	fat steers ...	1,976
Boy's wages ...	50	Received for forty-three	
Salt ... ...	40	feeders ...	2,107
Taxes ...	75		
Five per cent. for re- pairs ...	125		
Five per cent. for cattle insurance ...	200		
Interest on deferred payment on land ...	294		
Sundry expenses ...	116		
Balance ... ...	1,533		
	<hr/> 4,083		<hr/> 4,083

Thus giving an annual return of over £300.

533 dols. should be enough to meet the annual house expenses and clothing of a small family, as so much would be provided from the farm; the remaining 1,000 dols. could be used to advantage in paying off the deferred payments on the land; this would be clear in five years, when the income would be increased to nearly £400 a year.

Beyond this, there are several other advantages: the hogs, and calves from the milch-cows, with a few sheep, would provide most of the meat that would be required; the soil and climate are very favourable for vegetables and small fruits, which the stock-farmer could produce in quantities sufficient for his own use, with but little labour; poultry would get their own living in the summer in the timber and in the winter among the cattle; milk and butter would be produced on the premises; the timber would supply plenty of good fire-wood, which could be cut at leisure times; game and fish would be readily obtainable for a change, while rabbits are very plentiful;—so that the expenses for food would be small.

Another great advantage is that land all over the country is yearly rising in value; this land in particular, being so near Chicago, the best agricultural market in the world, is certain to increase in price more rapidly than any other;

indeed, its value has doubled within the last ten years, and the next decade will probably witness a greater proportionate gain. Thus the stock-farmer, besides receiving a good income, has the satisfaction of seeing his capital yearly increase in amount without any exertion on his part.

It is very necessary to exercise care that cattle should always have a supply of perfectly fresh water, which the windmill-pumps afford much better than ponds; regular salting is also very important. To the neglect of these two matters I attribute half the disease so prevalent among cattle in England.

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## CHAPTER VII.

### PUTTING UP AND PRESSING WILD HAY.

THIS is a business suitable for one—or better two—young men, with very limited capital. £300 (at present rate of exchange, 1,452 dols.) should be sufficient to carry matters to a successful issue. It will be better for two young fellows to go into partnership, than for one to carry it on alone, as they will be companions for one another; for, to carry out haying and out-door pressing most advantageously, they should make up their minds to spend most of their time in a tent, so as to be able to take their home wherever their business may lead them. Some little experience is also necessary in this case.

Let us suppose that two young fellows who have worked a season for some one already in the business have got the necessary capital, and made up their minds to start on their own account. They have either kept their eyes open while at work, and selected a suitable location, or, after looking round a while, have selected a tract of, say, 500 acres of land not too far from a railroad-siding.

There are numbers of such tracts to be found, held in an unbroken condition by speculations for a rise in price. These lands can be leased for a term of years for a small sum; the amount depending on the distance from a rail-

road, and the quality of grass produced. Let us suppose that in this instance a suitable tract has been found, some three miles from a railroad, and producing a fair quality of No. 1 prairie. The station I shall take, as in the preceding article, to be about 100 miles from Chicago. The rent of such a tract would be 50 cents per acre per annum.

The partners now buy two good teams of two horses each, that will cost them 400 dols. ; one smaller horse, suitable for riding and raking, 75 dols. ; two sets double, one set single harness, 75 dols. ; a tent capable of holding themselves and two hired men to sleep in, 25 dols. ; a tent for cooking and eating in, 25 dols. ; a stove, bedding, and cooking utensils, 25 dols. ; and a few hay-forks, 5 dols. ;—for these they will have to pay cash.

They will also require two mowers, 60 dols. each ; one horse-rake, 25 dols. ; one stacker, 50 dols. ; two carriers, 25 dols. each ; and two wagons, 60 dols. each, which they can obtain on one year's time, as is usual in buying implements.

Let us suppose all these obtained by July 1. They will now pitch their tents on the ground selected, and erect a comfortable stable for their horses of poles and hay, which they will by this time have learned how to build. They now hire for the year one good man at 20 dols. per month, and one boy fifteen or sixteen years old at 12 dols. per month ; also three men and teams (two-horse) at 2 dols. 50 cents per day to board themselves. The latter are hired by the day, and are only paid when at work ; the former they must board, their wages going on all the same wet or dry. They will now have five teams, one single horse, and seven hands, including themselves ; these are apportioned as follows : two teams and two hands mowers, two teams and two hands carriers, one team and one hand stacker, one man on the stack, and the boy and single horse raking. (See Frontispiece.) I append a cut of the stacker and carriers, as they will be new to most of my readers. Ten hours per diem is a day's work, usually portioned out as follows : from seven till twelve in the morning, from half-past one till half-past six in the afternoon. Wild grass should turn off a little over  $1\frac{1}{2}$  press tons per acre. Care must be taken not to stack too green, or the colour will be injured by

too profuse sweating in the stack ; nor should hay already cured be allowed to remain overnight in the swath, as the dew will injure the colour, and it is by this it principally sells.

The prairie is very flat, level, and easy to mow, there being no stones. Six acres is considered an average day's work for one team. One rake will easily rake all that two mowers can cut in the day. The easiest and most expeditious way to carry the hay is with the carriers and stacker. The plan pursued is as follows : a stacking place is selected in the centre of a block of some twenty acres, here the mowers start in, cutting outwards. (If they started on the outside of the block, cutting inwards, the hay farthest from the stack would be ready first, which is not desirable.) At noon a block of six acres will have been cut by the two machines. As wild hay on an ordinarily bright day requires but a few hours to cure, that cut in early morning will be quite ready to rake after dinner, after which the rake can be kept running till quitting time, raking up all that was cut in the morning ; as soon as the dew is off on the following morning, the rake can go on again. The ground should be raked to and fro, not around ; by this means all the winrows are in straight lines across the field, and are easier to handle.

As soon as enough has been raked to give a carrier-load in each winrow, the carriers are started. These go down between the rows till far enough for a load, when they turn into the winrow, and drive towards the stack, the hay in the winrow piling back on the teeth. Arrived at the stack, they are driven up to the head of the stacker, so that the carrier-teeth pass under those of the stacker, which consequently remove the hay from them. The horses are driven on till the hay is pressed by the back of the carrier as tight as possible against the uprights on the stacker-head ; they are then backed out and go for another load, while the team attached to the stacker-rope is started up, and the load thrown over on the stack. One man on the stack can handle the hay from two carriers, for when the stack is nearing completion the carriers are bringing the hay from the far sides of the block, and he has consequently more time to place it. When the stack is rounded up, a few

carrierfuls of green, coarse grass are spread over it. It is not thatched, but poles are laid across it to keep the top from blowing off. If well built, it will only wet in a few inches. From 600 to 800 lb. is a carrier-load ; two will easily put in what two mowers will cut, that is, 12 acres, or some 15 tons, per diem. The stack should be 36 ft. long by 16 ft. wide. It can be built with the stacker about 20 ft. to peak, which should hold all the hay in the block. The stacker spreads its load over about 18 by 10 ft., so the man has not much carrying to do on a stack of this size. Of course, on wet days, which (see Climate) are very few at this time of the year, the day hands will not have to be paid, while the monthly hands can be employed in oiling the machinery, cooking up a supply of food, cutting wood, and cleaning up round the stacks. The minute the rain stops the mowers can be started up again with advantage. If any hay, nearly or quite cured, gets rained on it must be turned over to dry, if in the winrow, and then stacked separately, as, being off colour, it will only be fit for distillery or packing purposes, and would hurt the sale of bright hay, if mixed with it.

Allowing for some delays, forty-five days of good hay weather should be sufficient to put up the 500 acres with the force we have taken. This should yield some 600 tons of hay. With an ordinary proportion of wet days, this brings us to about the beginning of September. Hay, before it is pressed, should stand for some sixty days in the stack, to allow it to go through the sweat, so, before pressing should commence, the partners will have a couple of weeks at their disposal. They must now make up their minds as to their future plan of operations ; two courses lie open to them : they can either dispose of their hay for cash when loaded in the car to some larger dealer, or they can ship it themselves. The latter course is preferable ; but, as in this instance, I am supposed to be dealing with men of small capital, I shall figure on their pursuing the former. During their leisure they can see about selecting a press, while their man and boy can employ their time in taking the tools to pieces, and in building a hay and pole shed in which to store them ; another such shed, capable of holding twenty to thirty tons of baled hay, should also be

built, to be prepared for any emergency, such as a sudden rainfall.

The best press they can buy for their purpose is the over-circle, four-horse Dedrick, making a bale 30 x 18 x 14 inches, weight from 100 to 115 lb. ; this will cost, with power, about 400 dols. They can either obtain this to be paid for in instalments, or can get it from any large hay-dealer, who will take his pay in baled hay of the same value.

Having obtained their press, and drawn it out to their ground, it should be placed in position at the first stack put up. As their teams will not be used to the work, it will be well to run it empty for a day or so, to get them accustomed to it.

They should also buy two canvases, one to cover their bales and the other the open stack, should a rain threaten.

A bargain should now be struck with a couple of teams in the neighbourhood to haul the baled hay from the press to the station, and place it in the car ; the price for this will vary according to the state of the roads and the time of year. From such a location as we have selected, it should not, at this time of year, cost them more than 75 cents per ton.

Everything is now in order to commence operations, say about September 10. At first they will probably not be able to turn out more than six tons per diem ; but in a week or two, when men and teams become more used to the work, they should increase this to eight, or even nine tons. The two teams engaged will take between them some six tons daily to the station ; but, as the press will have to be moved and reset every few days, which will take some hours, this will keep the bales pretty well cleared up. If they find they are getting ahead of the haulers, they may stop pressing for a half or whole day, as may be necessary, and set their two teams to hauling.

The railroads allow three days to load a car, which will give them ample time, even should a wet day intervene. During September, October, and early November, the weather is usually pretty settled, more than one wet day per week being uncommon. This gives them two months during which, in any ordinary year, they can count on at

least forty good days for pressing. In this time they should certainly run out 300 tons of hay.

From now on to mid-December, when it generally freezes up, they may look for unsettled weather and poor roads; so it would be well to stop pressing for a month. During this time, however, none of them need lie idle, for at this season there is always a good demand for men and teams for corn-husking. As soon as it freezes up, they can return to the camp and recommence operations, which should end in the whole of their hay being run through by the middle of February. There still remains some month or six weeks' good pressing weather before them; this they can utilise by moving about, buying hay from farmers, which they can press and dispose of in the same manner as they have done their own.

From middle March on, out-door pressing is rather a risky business, as the weather is usually unsettled and the roads very bad. This is the farmers' busiest time, however, so they will have no difficulty in finding work for themselves, hands, and teams, at remunerative wages, till it is time to go to haying again; or they can rent some land, and put in some crops for themselves.

Now, as to the profits of their season's operations. Allowing for a considerable percentage of off-colour hay, their 600 tons should average them at least 5 dols. 50 cents per ton on the car at the station—that is, 3,300 dols.

Against this we have an outlay in wages, board, &c., of—

	Dols.
Three teams during haying, at 2 dols. 50 cents each per diem (forty-five days) ... ... ...	337.50
One hand at 20 dols. per month for six months	120.00
One hand at 12 dols. " " "	72.00
Six months' board for selves and two hands, 1 dol. 50 cents per day ... ... ...	270.00
Six months' horse-feed for five horses, 1 dol. per day ... ... ...	180.00
Hauling 600 tons of hay to station, 75 cents per ton ... ... ...	400.00
Carried forward ... ... ...	1,379.50

	Dols.
Brought forward...	... 1,379.50
Wire necessary to tie 600 tons, 40 cents per ton	240.00
Shoeing horses, repairs, &c.	... 75.00
Rent, 500 acres, at 50 cents per acre	... 250.00
Six months' washing for four men	... 36.00
Oil, two barrels	... 19.50
	<hr/>
	2,000.00

Thus leaving a profit on their season's work of 1,300 dols., or nearly £275. Of course, I have not included in this calculation their board, nor their men's wages, during the time they are working out or handling other hay than their own ; for not only should they make these, but a considerable profit besides. I have put their board at a rather high rate, because in camp things are more liable to be wasted than in a house ; neither have I calculated that they make the most of their hay. If their capital was sufficient to rent storage at the station, and hold their hay for favourable markets, their profits would certainly be much larger ; but, as I have only been aiming to show what two young fellows, possessed of ordinary common sense and not afraid to work, could do in this business, with a very limited capital, I wished to keep my figures well within bounds.

From the following figures, it will be seen that my estimated capital of £300 (1,452 dols.) is quite sufficient to carry these operations to a successful issue. Of course, out of it only the hayfield expenditures will have to be met, in addition to the original outlay, as their hay is sold for cash as soon as pressed, when money will at once begin to come in. Before this occurs, however, their expenditure will as nearly as possible be as under :—

	Dols.
Cash paid out, as by first list, for horses, &c.	650
Wages during haying	... 475
Board	... 90
Horse-feed "	... 60
Canvas	... 50
Shoeing, repairs, &c	... 25
	<hr/>
	1,350

Leaving a balance for emergencies of a little over 100 dols. Out of the profits on their hay they will have to pay for the implements bought on time : these are—

	Dols.
Two mowers	... 120
Two wagons	... 120
Two carriers	... 50
Stacker	... 50
Rake	... 25
Press	... 400
	<hr/>
	765

Leaving them, if they are careful and make what they have earned while working out meet their expenses for clothes, &c., with a balance of 485 dols. (£100) to add to their capital, and with the whole of their outfit paid for. With any ordinary care, these implements will last for a long time, with the exception of the mowers, canvas, and ropes for stacker, which would have to be renewed about every four years, at a cost of—

	Dols.
Mowers	... 120
Canvas	... 50
Ropes	... 10
	<hr/>
	180

though the old mowers would fetch 40 dols. to 50 dols. towards this.

The experience the partners would gain in this business would well qualify them, as soon as they had increased their capital sufficiently, to start in hay-dealing, as described in my former article, in conjunction with which they could still carry on their outdoor operations.

## CHAPTER VIII.

## CORN-RAISING.

I DO not regard the growing of any cereal at its present price as likely to prove so remunerative or satisfactory to any one above the rank of a working man as the handling of stock, dealing in farm produce, or in fact any legitimate business ; still, even now, if suitable ground is selected, maize can be grown at a slight profit ; and, for reasons given earlier, this grain is likely to rise in price ere long, and land capable of producing it cannot be a bad investment, so I feel justified in devoting a chapter to it. Maize does best on good, high-lying, well-drained land. It is not a crop at all suited to low, wet lands, as these do not warm up soon enough in the early spring to give the young corn a start. Its roots rot, and the plant always has a yellow and sickly appearance. In addition, on cold land it grows so slowly that the hardier annual weeds get the start of it, and clean cultivation, which is absolutely essential to secure the production of a good crop, is thereby rendered impossible.

As much as forty acres of corn is frequently put in and tended by one man and team. With so large an area on hand, however, if any bad weather sets in, part of the crop has to be neglected ; and I much question whether the average return of forty acres tended by one man are equal to what thirty acres more carefully cultivated would produce; in consequence, I shall take the latter amount as all that one team can attend to with fair prospects of success.

For my example, I shall suppose that the settler has capital enough to purchase a good improved farm in the corn-belt, of 160 acres. This in Illinois will cost some 40 dols. per acre, including house, barns, fences, &c. (Though, for reasons stated previously, I do not recommend the purchase of improved farms, if land in its natural state can

be obtained.) The capital necessary to purchase and run such a farm would be—

	Dols.
Cost of farm, 160 acres at 40 dols. per acre...	... 6,400
,, 7 horses, at 100 dols. each ...	... 700
,, 2 wagons, 60 dols. each ...	... 120
,, 3 sets of harness, 30 dols. each ...	... 90
,, 2 riding-ploughs, 45 dols. each ...	... 90
,, 1 walking-plough ..	... 15
,, 2 drags, at 10 dols. each ...	... 20
,, 3 cultivators (horse-hoes) ...	... 60
,, 1 planter and check-rower ...	... 60
,, 1 mower and rake ...	... 80
,, Seed, horse-feed, &c. ...	... 150
Balance in hand for current expenses	450
	8,155

Four thousand dols. of the purchase-money on the farm could either remain or be easily obtained at 6 per cent. interest, which would reduce the actual cash needed to 4,155 dols., or considerably under £1,000, which latter sum would give ample capital in any emergency. A corn-farm is frequently planted year after year entirely to corn; but, though this grain, owing to its not taking up the whole of the land, and to the large amount of nourishment its tall stem and large leaves draw from the atmosphere, is not so exhausting to the soil as any other cereal, yet, in time, such treatment must lead to the impoverishment of the richest land. I shall, therefore, take the amount annually devoted to corn as ninety acres, to tend which three teams will be required. I have in my capital account allowed for seven horses, as, though a team consists of two horses only, a spare one, in case of any of them giving out, should always be kept. The farm-horses in America are very much lighter than those used in England, the average being about the size of a London bus-horse; they are consequently much more active, and able to get over more ground in a day than the English draft-horse. The ordinary walking-plough is a light iron beam, without wheels, cutting a 14-in. furrow, and turning over about two acres a day. In this two horses are

used abreast. A riding-plough is mounted between two wheels, over which is a seat similar to that of a mower, though the wheels are higher. This cuts a 16-in. furrow, and requires three horses abreast. A day's work with it is  $2\frac{1}{2}$  to  $2\frac{3}{4}$  acres.

About May 1 two of these riding-ploughs should be started, which in three days will have turned over fifteen acres of ground. One team can now continue ploughing with a walking-plough, while one can go on the planter, the other being kept to take its place in the afternoon. By thus changing teams, fifteen acres can easily be planted in a day.

It is customary with many people to drag before planting, but I object to this for the following reasons: corn, being a large grain, pushing out a strong and vigorous shoot, will germinate quite as readily in the rough ground as when a smooth fine seed-bed has been prepared, but weed seeds, being small, do not germinate then so readily as when the ground is levelled down; while a dragging across furrow five or six days after planting, when the corn is just coming out of the ground, will kill far more weeds when the ground is rough than when it has been previously harrowed, thus allowing the corn to get a little extra growth before the cultivator need be put in.

Corn is always planted in hills 4 ft. apart each way, so that a cultivator may be run through the rows in any desired direction. The implement used is called a planter, and consists of two low wheels 8 in. wide, which are attached to a frame and tongue, to which two horses are hitched; on the frame is a driving-seat, and above each wheel a seed-box, from which a spout and cutter run down in front of the wheel. This spout can be set to any desired depth—generally  $2\frac{1}{2}$  inches, and it is fed from an opening in the seed-box, which can be regulated to drop much or little, as desired. The usual number of grains sowed in a hill is from three to four, but I am sure, from experience, that, except on very rich land, better results can be obtained by planting from two to three. Over this opening a plate or dropper plays; this is attached to a handle, which is worked automatically by the check-rower. This is a wire rope stretched across the field, and having a button on it every four feet; this rope passes over the

planter, and through the handle of the dropper, every time a button is reached, this is drawn back and the grain allowed to pass down the spout, consequently each hill must be exactly four feet apart this way. The wheels of the planter, which plants two rows at once, are also exactly four feet apart, and a marker running beside the machine on the unplanted side affords the driver a guide by which to alter his rope, and return down the field, still keeping the same distance. The wide wheels of the planter act as rollers, compacting the soil over the newly-planted seed.

To ensure a good stand, it is necessary to exercise great caution in the selection of seed, as the germinating power of corn is apt to be greatly injured by exposure. The best plan is to select and pick the finest ears some little time before husking takes place, and to hang them up in some dry, well-ventilated place; then every kernel will be sure to grow. I allude to this particularly, for most American farmers are very careless in their selection of seed-corn, and have, in consequence, sustained heavy loss, as the expense of tending a partial crop is as heavy as tending a full one; and it stands to reason that, in a crop planted so sparsely as corn is, a small percentage of bad seed makes a very material difference in the crop. This may be more plainly understood when one considers that there are only about 7,680 plants of corn on an acre. Another bad habit of American farmers is that, when they seed down a piece of land, they generally cut it three or four times before turning it under, besides, before doing so, invariably omitting to dress it; in consequence, instead of seeding enriching their land, it rather tends to impoverish it. This is one reason why I say—Don't buy improved land.

To return to our example. On the fifth day the two riding-ploughs may be again set to work for three days, when, including the two acres ploughed by the walking-plough, seventeen acres more will be turned over. On the eighth day two teams plant fifteen of this, when ploughing is resumed till the twelfth day, by which time the ploughs are twenty-one acres ahead of the planters. The first planting is now ready to drag. Two teams may be set at this, while the third should plant eleven acres of the unplanted ground. On the thirteenth day ploughing is

resumed for another day, while the fourteenth, devoted to planting, brings the planters within two acres of the ploughs, with fifty-six acres in the ground. Proceeding thus, and allowing for some bad weather, all the ninety should be in and dragged early in June. Another man should now be hired, as three horse-hoes, or cultivators, must be run. Beginning at the end first planted, the cultivators are run along the planter-rows, each doing, if they work as carefully as they should, only about four acres per diem. This time through, the shovels of the horse-hoes are turned slightly inward, in order not to bury the young plant. In about seven days this operation is completed, and the cultivators are now run across the piece at right angles to planter-rows. They will go through this time a little faster,—as, the corn being higher, the rows are more defined,—taking about six days. This brings us into the latter half of June. Many farmers now go through their corn, following the planter-rows, and throwing the dirt to the hills so as to ridge up the corn. After this they, as it is termed, "lay it by"; but I consider by far the best plan is to go through it twice more, once each way, keeping the ground as near level as possible. My reason is, that the weather is now likely to be very hot and dry, and that the occasional showers have a better chance to penetrate to the roots of the plant when the ground is level than when shed off into the middle of the row by the ridges, especially as the leaves now afford sufficient shade to prevent undue evaporation, which is the only function the ridging can perform; indeed, I may say that ridging is only an expedient of poor farming, as by this means many weeds in the hill, which should have been removed by careful cultivation, are buried out of sight.

For the benefit of those of my readers who have never seen corn grow, I have placed a picture of an ear, in its natural state, on the cover, and will here give a short description of the plant, which is of very rapid growth, attaining its full height of from ten to twelve feet in from sixty to seventy days after planting. A golden tassel then makes its appearance on the top of the stalk, which, with the leaves of healthy corn, should be a rich, dark green. Very shortly the ear springs from the stalk about three or four

feet from the ground. It is encased in a thick covering of leaf, known as the husk, at the end of which is a bunch of vegetable fibre known as the silk. Its function is to catch the pollen as it falls from the tassel and convey it to the ear, which is thus fructified. The interior of the ear at first consists of a woody cylinder some eight to ten inches long by one inch diameter, known as the cob. Out of this the grains gradually swell for about a fortnight, when they have attained their full size, and the crop is termed "in the milk." These grains gradually harden, as they do so becoming indented at the outer end, till about mid-September, when corn planted in due season should be out of the way of frost. If a sharp frost should occur before the grain is hardened, the plant is at once killed, and the grain shrivels up and becomes almost worthless.

Having steered clear of frost till the end of September, the success of the crop is assured, and the grain, if necessary, may now be fed in moderate quantities to horses, cattle, or hogs, without fear of injury, but is not yet dry enough to market or store in large quantities. Towards the end of October, even with a favourable season, is as soon as husking should commence.

The most economical gang for husking consists of two men and a boy to each wagon and team. The team is driven straight down a row of corn, the men taking two rows each on either side of the wagon, while the boy following behind accounts for the row knocked down by it. The horses soon get used to the work, and after an hour or two require no driving to keep straight in the row. Each of the huskers has an iron peg, four inches long, strapped to his right hand, with which he tears back the husk, while with his left he breaks off the ear and throws it into the wagon. Such a gang of ordinary huskers should pick 100 bushels a day in good corn; a crack husker will easily gather 50 bushels in the ten hours.

Where only a small quantity of corn is raised, and many cattle are kept, the corn-stalks with the ear on them are frequently cut as soon as the ear is ripe, which is while the stalk and leaves are still quite green, and stood up in shocks,—twelve hills square generally going to the shock. As soon as these are dry, they are hauled home

and stacked till winter, when the ears are husked and the stalks fed to the cattle ; in this way it makes excellent fodder. On farms principally devoted to corn, the run of the stalks after husking is generally sold to some cattle-man, fetching, as a rule, fifty cents per acre.

When the corn is husked, it is shovelled from the wagon into long narrow sheds, called cribs, built of six-inch boards nailed to upright posts. The boards should be left  $1\frac{1}{2}$  inch apart, to allow free circulation of air. These cribs should not be more than eight feet wide, so as to assist this free circulation ; and, for the same reason, a considerable space should be left between the top of the corn and the roof ; indeed, many farmers do not roof in their cribs at all, as rain does the grain, while in the ear, but little damage.

If necessary, corn may be left in the field unhusked all winter without material damage. After standing a time in the cribs, depending on its condition when placed there, the corn may be either hauled off to market, or left for any length of time, till it is required for feed.

For feeding purposes corn is usually sold in the ear, in which state 80 lb. go to the bushel till mid-December, after that 70 lb. For shipping East, the farmer can either shell it, or the grain-dealer will buy it in the ear and shell it himself, the price being the same as the cobs will pay for shelling. The weight of shelled corn is 56 lb. per bushel.

Most arable farms of 160 acres, or even more, consist of but one field besides the barn-yard, house, orchard, and, say, ten to fifteen acres of pasture to keep the cows necessary for the home use, and give an occasional turn-out for the horses ; house yard, garden, orchard, and roads absorb about some ten acres, leaving 135 acres available for crops. In order to keep up the farm,  $22\frac{1}{2}$  acres should each year be sown to oats, with which clover and timothy are sown. This is cut the following year, and the succeeding winter all available manure hauled on it. As soon as the frost is out of the ground, it should be broken up and left to lie till planting-time, when the drags and cultivators may be run over it before planting. If turned over immediately before planting, the cut-worm is apt to injure the corn crop.

This leaves us with the following crops on the farm:—  
 90 acres corn,  $22\frac{1}{2}$  acres oats,  $22\frac{1}{2}$  acres seeds. Between the rows of forty-five acres corn, rye should be sown the end of September. If this piece is reserved for the last ploughing, say middle May, the rye will by that time make a fine green crop to turn under, and will restore as much, if not more, to the soil than the corn crop has taken out of it. Under this system, we have the following succession of crops:—Oats, seeds, corn, corn (rye sown in September), corn (oats); which, if a plentiful supply of manure is applied to the seeds before turning under, will keep the farm up to its original standard.

On a farm costing 40 dols. per acre, these crops should return as a minimum in a fair season—

$22\frac{1}{2}$ acres corn on timothy sod, 50 bushels					
per acre	...	...	...	...	$1,125$ bushels
$22\frac{1}{2}$ acres corn on corn-stubble, 35 bushels					
per acre	...	...	...	...	788 "
45 acres corn on rye turned over, 40 bushels					
per acre	...	...	...	...	$1,800$ "
					<hr/>
Total corn	...	3,713	"		
$22\frac{1}{2}$ acres oats, 50 bushels per acre	...	$1,125$	"		
$22\frac{1}{2}$ acres timothy, at $1\frac{1}{2}$ tons per acre	...	33 tons			

Deducting from this 725 bushels oats, 313 bushels corn, and 21 tons of hay as horse-feed and seed, we have, at present market prices in the country—

	Dols.
3,400 bushels corn, at 35 cents per bushel	$1,190\cdot00$
400 bushels oats, at 25 cents per bushel	$100\cdot00$
12 tons hay, at 6 dols. per ton	$72\cdot00$
	<hr/>
Turn out in corn-stalks...	$1,362\cdot00$
	<hr/>
	$45\cdot00$
	<hr/>
	$1,407\cdot00$

The cost of producing this has been—

	Dols.
One man all year ... ... ...	200.00
His board ... ... ...	100.00
One boy and board, May, June, July	60.00
One man and board, June, July ...	60.00
Seed-rye for sowing 45 acres, 1½ bushels per acre at 50 cents per bushel ...	33.75
Wear and tear in machinery, 15 per cent.	78.00
Other repairs ... ... ...	20.00
Depreciation on horses ... ...	70.00
Self-binder to cut oats, 1 dol. 25 cents per acre ... ... ...	27.62
Thrashing oats ... ... ...	40.00
Extra labour in husking time ...	50.00
Boy during December to help market corn ... ... ...	20.00
Shoeing horses while hauling corn to market ... ... ...	10.00
Timothy and clover seed ... ...	20.00
	<hr/>
	789.37
Balance to the good ...	616.63

If we deduct from this 384 dols. for interest of money invested in the land, it does not make a very grand showing, though it must be considered that the farmer will have no house-rent to pay, and will get a large part of his food from the farm and garden; still, these figures hardly recommend corn-growing at present prices, as seasons are not always favourable, and a wet spring or early frost might so cut down the yield that receipts would barely meet expenditures. If the corn-grower's capital allows of the purchase of cattle or hogs to which to feed his grain, his income will make a better showing, as his labour will be no higher, while his crops will profit by the extra manure; but even then he would run less risk by renting out his land in the manner I shall now describe. Land in America is not usually let for a cash rent, but for a share of the crops raised. This share varies from one-third to two-fifths according to the

quality and location of the land. In renting for such a share, a house and stable is generally provided for each tenant; but, beyond that, he provides everything, and keeps the fences in repair and hauls out his share of the manure. If a farm of 160 acres, such as I have been dealing with, was intended to be let on this plan, three small houses and two-stall stables should be built on it at a cost of 150 dols. each. Taking out ten acres for roads, home-yard, and paddock for a cow or two, would leave fifty acres to each small house. These would readily let for one-third the crop, delivered in owner's barn or at nearest market, if he was indisposed to feed it himself. An agreement should be made, that of this fifty acres thirty should annually be planted with corn, ten with oats, and ten seeds; also that yearly ten acres at least of rye should be sown in the stalks for turning under in the spring, the owner finding the seed. Averaging the corn at 40 bushels per acre, the oats 50 bushels per acre, and the seeds 1½ tons, the owner would get—

	Dols.
1,200 bushels of corn, at 35 cents per bushel ...	420'00
500 bushels of oats, at 25 cents     ,,     ,,	125'00
15 tons of hay, at 6 dols. per ton     ,,     ,,	90'00
	<hr/>

Deduct—

	Dols.
Taxes ...     ,,     ,,     ,,     ,,	30'00
Seed-rye     ,,     ,,     ,,     ,,	22'50
	<hr/>
	52'50
	<hr/>
	567'50

Or nearly as much as he would receive when at the trouble and risk of farming the land himself. Besides, he would have some 1,000 dols. of his capital freed to buy stock to which to feed this grain, by which his income should be materially increased.

Let us now see how the renter's position under this arrangement would compare with that of the labourer, when the farmer was farming his own land. He would require about £100 capital, which should be expended as follows:—

	Dols.
A team ... ... ... ...	200
Walking-plough ... ... ...	15
Drag ... ... ...	10
Cultivator ... ... ...	20
Wagon and harness ...	90
Furniture ... ... ...	75
Sundries ... ... ...	10
Balance for expenses ...	64
	<hr/>
	484

It is usual for the owner to keep a planter, mower, and rake, which he lets out to the tenants for sufficient to pay for the tools by the time they are worn out, with a fair interest on the money they cost. During haying, harvesting, and any other work requiring more than one hand, the tenants generally help each other in turn.

After deducting 200 bushels of oats, and 100 bushels of corn, and 6 tons of hay for horse-feed and seed, the renter has for sale—

	Dols.
700 bushels of corn, at 35 cents per bushel ...	245'00
130 bushels of oats, at 25 cents per bushel ...	32'50
4 tons of hay, at 6 dols. per ton ...	24'00
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	301'50

Deduct—

	Dols.
Cutting and thrashing oats ... ... ...	32'50
Taxes ... ... ...	5'00
Timothy seed ... ... ...	4'50
Wear and tear on machinery and horses	50'00
Shoeing and repairs ... ... ...	15'00
	<hr/>
	107'00
	<hr/>
	194'30

To earn this, he will have to work through April, May, June, and July, hauling manure and putting in and cultivating his crops and harvesting his hay and oats; a few days at

the end of September sowing his rye ; November husking corn, and December marketing same. This leaves at his disposal August, most of September, January, February, and March. In August and September he will have forty working days, allowing for bad weather, during which he can readily obtain 2 dols. 50 cents per diem working for some man in wild hay, as I have described in a former chapter, or 100 dols. in all. January and February should afford forty more working days, during which he should be able to earn 2 dols. a day hauling baled hay, wood, stone, &c. This adds another 80 dols. to his income. In March he will not find work easy to obtain, but can put in his time cutting wood, fixing fences, &c., while his team can rest in readiness for the spring work. His total income under these circumstances will be—

	Dols.
By sale of crop	194·50
Forty days' haying, at 2 dols. 50 cents	100·00
Forty days' hauling, at 2 dols. ...	80·00
	<hr/>
	374·50

as against 200 dols. and board as a yearly labourer. In addition, he would have a house rent free for himself and family, and could raise a pig or two, which, with chickens and garden produce, should go far towards his living expenses. So it will be seen that this system of renting gives advantages both to the farmer and the working man. On some farms the co-operative system of farming is carried still farther, the owner providing his renters with horses, implements, board, feed, and seed ; in return, receiving two-thirds of the annual crop.

It seems to me not improbable that by some such system as the above the agricultural problem in England will eventually be solved, the tenant-farmer being eliminated and the landowner, either himself or through an agent, keeping the necessary stock to consume the produce of the farm or group of farms he may own.

In my remarks on wheat-growing I give the necessary process to bring unimproved land into a condition suitable for the production of corn.

## CHAPTER IX.

## HOG AND CATTLE DEALING.

THE extent to which hogs are handled in the Western States is so enormous as to be almost beyond the comprehension of any one who has not passed through the stock-yards and vast packing establishments of Chicago, where are now handled more hogs than in all the other cities of the continent put together. During the winter packing season, which lasts from November 1 to March 1, the average daily receipts of live hogs are over 30,000,—50,000 being frequently received on one day,—while the number has sometimes run up as high as 80,000. During this time, Armour & Co., the leading house in the trade, kill a daily average of over 5,000; indeed, all these vast receipts, with the exception of some 3,000 daily bought for the Eastern market, are handled in Chicago.

During the remainder of the year the receipts are not so large, but even then they exceed 10,000 daily. Prices for hogs are subject to great fluctuations. Within half a dozen years I have known them sell as low as 2½ cents per lb. live weight, and as high as 8 cents for the same class of hog. For the last few years they have fetched good prices, though an abundant corn crop and large supply of hogs have now somewhat reduced the price. I append an abridged report of the live stock market at the Chicago yards for January 9, 1885, the last I have to hand:—"Estimated receipts for the day, 50,000. Quality not so good. Left over about 7,000. Market active and firm. Packers and shippers free buyers. Sales range 4 dols. 25 cents to 4 dols. 55 cents for light; 4 dols. 25 cents to 4 dols. 45 cents, common mixed packers; 4 dols. 50 cents to 4 dols. 75 cents, heavy packing; 4 dols. 75 cents to 5 dols., shipping lots. Shipments, 3,500." From the same report I take the following:—

Total number packed in the West last year, 5,402,064, of which Chicago handled nearly 3,000,000.

Total number packed from November 1 to January 7 this season, 3,116,800; in Chicago, 1,625,000.

Hogs are always bought and sold, both in Chicago and the country, by the pound, actual live weights. The recognised grades in the Chicago trade are—

*Heavy shipping.*—Smooth, well-fattened barrows, averaging from 350 lb. to 400 lb.; worth now 4 dols. 75 cents to 5 dols. per 100 lb. These are sold to go East, and during winter fetch the top of the market.

*Heavy packing.*—Smooth, well-fattened sows or barrows, suitable for lard-hogs, running 350 lb. to 500 lb.; now worth 4 dols. 50 cents to 4 dols. 75 cents per 100 lb.

*Mixed packing.*—Common hogs, sows, and barrows mixed, averaging from 200 lb. to 300 lb.; now worth 4 dols. 25 cents to 4 dols. 45 cents. This is the grade in greatest supply.

*Prime light.*—Smooth, not very fat hogs, running from 175 lb. to 200 lb., suitable for cutting into bacon, hams, and shoulders; now worth 4 dols. 50 cents to 4 dols. 60 cents. In summer these fetch the top price.

*Light.*—Any light, fairly-fattened hogs, from 150 lb. to 200 lb.; now worth 4 dols. 25 cents to 4 dols. 40 cents.

*Skips and Culls.*—Such hogs as are unfit for any of the lower grades, which would fetch from 2 cents to 4 cents per lb. now, according to quality.

By the rules of the yards a shrinkage of 80 lb. is allowed on each stag or boar and 40 lb. on each pregnant sow, which deduction the country dealer also makes. Another rule is, that all animals must be able to walk on to the scale to weigh or the buyer may reject them, when they are sold as cripples, at a reduction. No dead animals are allowed to leave the yards on any pretence whatever, but are taken charge of by the officials and despatched to the stink factories, as the rendering-houses and manure-factories are called. One cent per lb. is allowed for dead hogs under 200 lb., 2 cents for those over that weight.

The yard-charge is 7 cents per head for hogs and 50 cents for cattle: this includes water. The yards, being a monopoly, charge highly for feed, corn being always 1 dol. a bushel and hay 30 dols. per ton, no matter what is the market price.

Stock-trains are generally timed so as to arrive at the yards somewhere about five o'clock in the morning; and business commences as soon as it is light, being generally over for the day by eleven to half-past. A stock-car will hold from fifty to seventy hogs, according to size, the weight carried running from 17,000 lb. to 18,000 lb.

On the arrival of the car at the yards, the stock is taken charge of by the commission man or his agent, to whom it is consigned. If of mixed grades, he will sort them out, or if there are only a few good hogs he will sell them altogether, in order to raise the average of the others. Soon after the hogs have arrived in the pens, the agent of the shipper or packer comes along and bargains for the hogs; if the receipts are small or the market on 'Change for hog products rules firm, the salesman will demand an advance of 5 cents to 10 cents. If the weather is unfavourable for packing operations, the receipts large, or the quotations for the manufactured article rule lower, he will have to submit to a similar reduction. As soon as the price is decided, the buyer throws out such hogs as are unsuited to his requirements, the remainder are weighed, the amount of shrinkage, if any, determined, and a cheque for the amount they come to at once given. If a sale has been made to a shipper, the rejected hogs are usually good enough for packers. If the original bunch were sold to packers, those rejected must be sold as skips and culls at a reduction. In consequence of the high prices for feed, the commission man, if the market is dull and heavy, will generally, unless specially ordered to the contrary by the shipper, sell out, at a considerable reduction, to a scalper or speculator, who will hold them till the market recovers. If the shipper is not in an immediate hurry for his money, I regard it as sounder policy to instruct his commission man to hold on to the stuff, as, when the market rules dull, the telegraph is freely used, and all shipments from the country stopped, so that, strengthened by small receipts, it generally quickly recovers.

Hogs are generally gathered up from the farmers in the country by shippers, who establish themselves at some country town affording good railroad facilities, and the

centre of a good agricultural district. From here they sally out in all directions, making themselves acquainted with what stock in their particular line each farmer has, and when that stock is likely to be ready for market. At every railway station are convenient yards, fitted with shutes, for the carring of cattle or hogs. At these the railroad company will allow the shipper, free of charge, to erect an office and scales, which should not cost him more than 150 dols. As soon as the market appears favourable and he finds there is enough stock of the sort he wants to fill a car, he goes to the farmers having it, and bargains for it to be delivered on a certain day at these scales. Hogs are generally brought in in wagons. These are driven on to the scale and weighed, the hogs turned into the yards, the empty wagons re-weighed, and the difference between the two weights, which is the weight of the hogs, settled for at the agreed price. Under this system a dealer does not require as much judgment as he does in England, as he knows exactly what he is getting for his money. Some little experience is, however, necessary to enable him to fix what grade the hogs belong to, and the amount of shrinkage to which he is entitled.

For the purpose of arriving at the probable profits a man would make in the business of dealing in hogs, we will suppose that he is located at some town about 100 miles from Chicago, at which distance the freight will be about 25 dols. per car. We will take the average weight per car on starting at 17,000 lb. At such a distance from Chicago, the stock-train would pass about eleven o'clock at night, and it would not be safe to count on the hogs being weighed over to a purchaser before eleven o'clock the next day, or twelve hours, during which the hogs will shrink two per cent.; this will reduce the car-load, on being weighed out to the seller, to 16,600 lb. There must also be some allowance made for dead and crippled hogs, though, as these will not be a total loss, 10 dols. per car should cover this, if we estimate the price of packing hogs in Chicago at 4 dols. 50 cents per 100 lb. When the price of hogs rises, the shipper must, of course, leave a larger margin between the price he pays and the Chicago price, as his loss by shrinkage and dead hogs will be greater; while, if prices fall, his profits

will be as good at a reduced margin. With the present prices at such a distance from Chicago as we have taken, he should have a margin of 70 cents per 100 lb.; a car-load of 17,000 lb. would therefore cost him at initial point 646 dols.; his return from his commission man should be—

	Dols.	Dols.
16,640 lb., at 4 dols. 50 cents per		
100 lb.   ...   ...   ...	749.50	
Deduct commission   ...   ...   20.00		
"   freight   ...   ...   25.00		
"   yard charges   ...   ...   5.00		
"   for dead and injured   ...   10.00		
	—	60.00
		689.50
Taking original cost   ...   ...   ...	646.00	
		—
		43.50

We have, therefore, a profit of 43 dols. 50 cents per car.

The fluctuations of the hog market are generally 5 cents to 10 cents per diem. A fall of 10 cents per 100 would materially reduce the shipper's profits, and having to keep the hogs over a day or two might cause them to entirely disappear. If he has selected a good commission man (Gregory, Cooley, & Co. and Conger Bros. are two of the best), he will keep him so well informed of the tenor of the market that he should be able to make his purchases accordingly; while, of course, he will sometimes strike a rising market, so I do not think I should be at all above the mark in putting his average profit per car at 30 dols. In a reasonably good agricultural district, say of six miles radius, a shipper should be able to pick up at least six cars a month during the four months of winter packing and three cars a month during the other eight months, or say fifty cars a year, so that his annual income should be about 1,500 dols. Three hundred pounds will be capital enough to start as a hog-shipper, as all he will have to buy will be a team and buggy to run round among the farmers with, which will

cost him, say, 300 dols.; add to this 150 dols. for scale and office, and we have a balance of 1,000 dols. to buy hogs with. The cost of a car-load at present prices is 646 dols., all expenses are paid by commission men, and a cheque for returns may be looked for before the shipper is ready to send another car; the surplus will be required in order to make occasional advances to farmers who may require a little money before their stock is quite ready or before the shipper is prepared to take it. As his capital increases, more can be done in this way, and if the shipper builds a yard near the station, at which he is ready to take any hogs that may be drawn in at any time, he will frequently strike great bargains, as at tax-paying times and dates of paying interest on mortgages, farmers are often short of cash, and would deliver hogs freely at a reduced price. To do this requires considerable capital, however, as for many of the deliveries the shipper must buy feed, and hold the hogs for a considerable time before they are ready for shipment.

With an income of 1,500 dols. a year, he should be able to add considerably to his capital annually, as, if a single man, he could board for 5 dols. a week, while his personal expenses and horse feed should not exceed this sum; this would leave him 1,000 dols. to add to capital. If a married man, 1,000 dols. should suffice for house-rent and annual expenses, which would leave him 500 dols. to add to capital. When his capital admits, he may add cattle to hog-dealing, and materially increase his income without much extra work.

The best way for a man to gain the necessary experience to deal successfully in hogs or cattle is to obtain a situation in some capacity with a firm in the stock-yards for about a year; he will then thoroughly learn how to grade his stuff. If he cannot obtain such a situation, he should attend the stock-yards regularly for at least six months, which will cost him some £75 for board, &c., but he will find that the money has been laid out to good advantage if he makes the most of his opportunities to learn.

Cattle are mostly marketed in a similar manner to hogs. A car-load consists of fifteen to eighteen, according to size. Their present quotations are, quoting from report

of Jan. 9:—"Estimated receipts for day, 7,000; quality only fair; market quiet and steady. Quotations: Common native shipping steers, 4 dols. 75 cents to 5 dols. 25 cents; choice shipping ditto, 5 dols. 50 cents to 6 dols. 60 cents; butcher's stock, 4 dols. 25 cents to 4 dols. 50 cents; fat cows, 2 dols. 75 cents to 3 dols. 75 cents; bulls, 2 dols. to 3 dols.; stockers and feeders, 3 dols. 50 cents to 4 dols. 50 cents; all per 100 lb., live, net, according to quality.

Prime shipping steers are well-fattened, corn-fed bullocks, averaging 1,400 to 1,500 lb., generally four-year-olds next grass. Common shipping steers are from 1,200 to 1,400 lb., not quite so fat or smooth.

Butcher's stock are mixed heifers and steers, fairly fat, but not good enough to ship East.

Fat cows and bulls are usually bought by the manufacturers of canned beef or packers of salt beef.

Feeders are well-grown steers in fair flesh, three years old, and averaging 1,000 to 1,200 lb. These are bought to put on corn by feeders and distillers.

Stockers are younger cattle, weighing less than 1,000 lb., and require another summer at grass before they are sufficiently matured for feeders.

The average daily arrivals of cattle in Chicago the year through are about 8,000; sometimes 12,000 are received during the day, and occasionally the run is as heavy as 14,000.

Of course, there are no grass fat cattle in the market at this season. On the basis of above prices, good grass fat steers, 1,200 to 1,400 lb., would bring from 4 dols. 50 cents to 5 50 dols. per 100 lb.

The main grades of cattle a dealer would handle would be common shipping steers, butcher's stock, and fat cows, the best shipping coming generally from large feeders, who ship their own stuff.

On native shipping steers the shipper should have a margin of 70 cents, as well as on hogs. They should now bring for fair animals about 5 cents in Chicago. A car would hold about fifteen, averaging at point of shipping 1,300 lb. apiece. This would make the car weight 19,500 lb. There would be a shrinkage of about 2 1/2 per cent. on this before the cattle could be weighed out to a buyer; so that

their weight then would be about 19,000 lb. ; this at 5 cents per lb. would amount to—

	Dols.
	950 <sup>00</sup>
Deduct commission	Dols.
"    yarding	25 <sup>00</sup>
"    freight	7 <sup>50</sup>
"    loss by cripples	25 <sup>00</sup>
	10 <sup>00</sup>
	<hr/>
	67 <sup>50</sup>
Taking from this their first cost at	<hr/>
4 dols. 30 cents	...
	...
	...
Leaves	43 <sup>00</sup>

A load of fat cows of similar average, if worth 3 dols. in Chicago, would net 512 dols. 50 cents ; and would return a like profit if bought at a margin of 55 cents per 100 lb., as the loss on shrinkage would be less. Similarly, in more expensive cattle, the margin would have to be greater.

A dealer in cattle would, besides, get plenty of work in the fall picking up feeders for the distilleries and large corn-growers, and calves for the cattle-raisers, for, travelling round his neighbourhood as much as his business would necessitate, he would at once be able to put his hand on the stock required. Taking all grades into consideration, a territory of six miles radius should furnish him on an average at least one car-load a week the year round.

## CHAPTER X.

## CANADIAN POSSESSIONS.

THE Dominion of Canada extends from the Atlantic to the Pacific Ocean. Its area is 3,470,392 square miles. It is divided into eight provinces, as follows :—

Nova Scotia, containing 23,907 square miles; New Brunswick, 27,174; Prince Edward Island, 2,133; Quebec, 188,688; Ontario, 101,733; Manitoba, 123,200; North-West Territories, 2,665,232; and British Columbia, 341,305. With the exception of Ontario, Manitoba, and the North-West Provinces, none of these divisions offer any attractions to agriculturists. In Ontario is some fair land, but it is held for above its value, when compared with prices in Manitoba, which, when the railway is constructed to Fort Nelson on Hudson's Bay, is actually nearer tide-water. Ontario is neatly and well farmed, many of its settlers being of Scotch descent; but I should not recommend any young man to pay a premium to learn farming there, as many have lately done, but, far rather, to go on West, where he can learn farming in a practical manner, receiving a bonus of £4 to £6 a month, instead of paying any premium. No one going to any part of Canada should think of going by any other line than the Allan, as this line lands him directly in the country. Formerly, in order to reach Manitoba, even when landed in Canada, one had to pass through the States; but the "all-rail line," of the Canadian Pacific Railway, north of Lake Superior to Winnipeg and the Western Provinces, will be ready for traffic about the time navigation opens to Quebec (middle of April), and passengers will have through sleeping-cars and such accommodation as they have never had before, and the long, tedious, and expensive route *via* Chicago will be avoided. After this date they can step on board the Canadian Pacific cars at Montreal and go right through to Winnipeg, without change, in about half the time it used to take them by the old route. Another advantage by this new route

is, that they will have no trouble with their baggage, which will be checked and forwarded by the same train as themselves; for the railroad runs through British territory all the way, consequently there will be no Customs overhauling after the passenger leaves Quebec.

The crack boat of the Allan line is the *Parisian*, a four-masted, barque-rigged, double funnelled steamer of 5,500 tons, fitted with every convenience. The quickest passage on record between Liverpool and Quebec was made by this boat, when she left Rimouski at 10.55 P.M. on September 2, and landed her mails at Merville at 7.30 P.M. on the 9th, the passage taking, allowing for difference of time between these points, 6 days 15 hours 32 minutes. During this trip land was only lost sight of for 4 days 11 hours.

Wheat is at present at such a false price, that I shall not attempt to draw a balance of what the probable profits of a wheat-farmer in the Canadian North-West would now be; as, though I could show a profit, it would give an unfair idea of what the capabilities of this splendid country really are. But if it can now be raised at a profit, as it undoubtedly can, how great will be the returns when, as it certainly will, wheat in a year or two resumes its usual place in the price current.

It is only a country of such unexampled fertility as Manitoba that can long stand to grow wheat at present prices. The acreage sown in the States decreased last year, and will decrease much more rapidly this, as the farmers get time to make other arrangements. England cannot long continue to grow wheat at present prices, or even at a considerable advance on them; her farmers must seek a rent-payer in some other crop, and leave to the glorious North-West the task of supplying the mother-country with bread; for their pet scheme of a duty on a sliding scale is an anachronism, and can never be realised.

Australia may be a competitor, but, as railroads throughout the North-West are cheapened, and transportation facilities are increased, the nearness of the latter to market will always prevent the competition of the former from being irksome. As to India, how can England consent to look for her main food-supply to a country where, only a

few short years ago, hundreds of thousands of human beings perished for the want of that very bread with which Eastern enthusiasts boast India will in future supply the world?

According to Nature's law, which I have previously quoted, the nearer one approaches the northern limit of profitable cultivation of a grain, the larger its yield, and the better its quality. The North-West Provinces are the natural granary of the world, and, unless I am much mistaken, ten years from now they will have taken a place far ahead of any other country as producers of bread-stuffs. The average yield of small grains in the great wheat-producing countries is as follows:—

		Wheat.	Barley.	Oats.
Manitoba	...	29·0	42·0	56·0
United Kingdom	...	28·8	34·2	43·2
Minnesota*	...	11·4	32·5	35·6
Iowa	...	10·6	20·8	36·2
Ohio	...	13·3	16·4	27·7
Indiana	...	10·8	26·0	23·0
Illinois	...	13·0	20·0	33·0

These high average crops are a practical proof of the great fertility of the soil and of the adaptability of the climate to the growth of cereals. The soil consists of a rich black loam from eighteen inches to three feet deep, resting on a subsoil of clay and sand. Of it that good authority, Dr. S. Macadam, of Edinburgh University, says: "Very rich in organic matter, and contains the full amount of the saline fertilising matters found in all soils of a good bearing quality." "It is so rich that it does not require the addition of manure for years after first breaking, and whenever the loam is three feet deep it is practically inexhaustible."

The reason that this good land is now so cheap is, that there is so much of it, but this, if now a source of weakness, will in time be one of strength. The world is growing rapidly; countless as are these rich acres, the ploughshare will soon have passed over them all; then will the land, now to be bought for ten shillings an acre, be

\* Leading wheat state of U.S.A.

worth twenty, nay fifty, times as much ; and when Macaulay's typical New Zealander surveys the ruins of London, he will be fresh from admiring the capital of the world enthroned in the midst of the beautiful North-West, which he will have passed on his way East by the Canadian Pacific Railroad. This railroad received from the Dominion of Canada as a subsidy 25,000,000 dols. in cash and 25,000,000 acres of land, consisting of every odd section (square mile), in each township,—with the exception of Nos. 11 to 29, which are reserved to be sold for educational purposes,—on either side of the line for twenty-four miles. Much of this consists of the finest land in the world, yet the company, in order to settle it up and increase the traffic of their road, are offering it to actual settlers at the ridiculously low price of ten shillings per acre, giving in addition a rebate of one-half on every acre brought into cultivation within five years. What a chance for English landlords to buy an estate in this fertile country on which to place their younger sons ! They could settle it up with the sons of their tenantry, giving them a good start in life, and in many instances relieving their fathers of a great burden. Such a community, held together by old associations, would be sure to succeed, and give to the owner of the land a return that would go far to restore his income, now curtailed by the reduction in rents.

The principal town in Manitoba is Winnipeg, which is situated on the confluence of two navigable streams—the Red and the Assiniboine rivers. It was formerly known as Fort Garry, and was one of the chief trading stations of the Hudson's Bay Company. Twenty years ago its only population were the company's traders and a few half-breeds. In 1878 it contained 10,000 people, and to-day its population is estimated at 60,000. Along the line of the Pacific Railway, which is completed to Stephen, at the summit of the Rocky Mountains, over 900 miles from Winnipeg, new towns are springing up every eight or ten miles, in which are openings for men of all trades and professions. The principal of these are Portage La Prairie, Carberry, Brandon, Virden, Moosomie, Broadview, Qu'appelle, Regina, Moose Jaw, Swift Current, Maple Creek, Medicine Hat, Crowfoot, and Calgary.

The prairies all over America were, in their natural state, covered with a tough sod, which it is necessary to turn over and subdue before cereals can be cultivated. Breaking, as it is called, consists of ploughing this sod to a depth of 2 inches to  $2\frac{1}{2}$  inches with a plough made so as to turn it completely over. When this is properly done, the broken prairie should present a perfectly even appearance. Having lain in this shape through a winter, the land is backset—that is, ploughed with an ordinary plough to the depth of 5 inches ; this is harrowed by disc harrows, which cut up and pulverise the partly-rotted sod, and make a splendid seed-bed for any cereal.

Many farmers sow small grain broadcast on the prairie before turning it over. Much of this will force its way through the overturned sod, though a full crop can hardly be expected. Some oats, at any rate, ought to be sown in this way by a new-comer, in order to provide feed for the ensuing year. The practice has other recommendations, as the growing plants assist to disintegrate the sod and keep down the growth of weeds, which would otherwise mature seeds enough to cause the farmer much trouble and loss in the future. If the breaking is done too late to sow any of the small grains, buckwheat, millet, or turnips may be sown on it with advantage. In the corn districts, corn is planted on the inverted sod, which requires no tending, and which will produce from one-half to two-thirds an average crop.

The sowing season in Manitoba, for wheat and oats, begins the end of April and finishes the middle of May. Harvesting commences in August and ends in September. The grain is generally threshed in October and marketed during the winter months. The seasons are—

*Spring*—April and May. Warm sunny days and cool nights. As soon as the snow melts and the frost is out of the ground, vegetation commences to grow apace.

*Summer*—June, July, August. Weather bright and clear ; very warm during day, but pleasantly cool at night ; frequent thunder-showers.

*Autumn*.—September and October. The most enjoyable season of the year ; quite warm enough for comfort. Weather dry and settled.

*Winter*—November, December, January, February, and March. The three middle months very cold, but dry ; the others stormy and unpleasant.

It is frequently stated that £100 is capital enough with which to take up land in Manitoba, but I should not advise any man with a family to go there with the idea of doing this unless he had at least £500. Although his land will cost but a trifle, it must be fenced, and a house and stable built. This will make a hole in £200, as a comfortable house is absolutely necessary in so cold a climate. He must also purchase furniture, horses, a cow or two, and implements, though he can get time to pay for the latter. In addition, he must reserve funds enough to keep him for at least eighteen months, as it will take that time before he can calculate with any certainty on having any grain to sell. The first year he will have his horse-feed also to purchase ; though I think the best plan is to defer buying horses till the second year, and to have his breaking done by contract, which will cost him 2 dols. 50 cents per acre. By doing this he can devote his whole time to assisting to build his house, putting up his fencing, and getting things generally in order. He should time his arrival in the country so as to have plenty of leisure for this before the winter sets in, arriving there certainly not later than the middle of August.

If a man cannot command £500, it is no reason why he should not go to Manitoba. Even with nothing, if he is strong, enjoys good health, and is willing to work, he can soon have a farm of his own. Wages are high—ordinary hands getting during the summer £6 to £7 a month, and board, and from £50 to £60 a year if hired for that time. His expenses for clothes need be light, so that he should save at least £40 out of this. If his capital is only £100 to £200, he had better hire out in this way to some other man till he has increased it sufficiently to start for himself comfortably, loaning his money out on interest in the meantime, than endure years of debt and discomfort by taking up land before he has the means to do so.

Stock can be kept profitably in Manitoba, as, though there is little maize raised, other good fattening grains, such as barley and peas, grow well, while timothy and clover can

be produced on cultivated land, though the wild grass on the prairies affords a very sweet and nutritious hay, which is said to be much better than that produced from wild land in the States.

There is one advantage which the Canadian possessions have over the States for a British subject. There, if otherwise qualified, he is entitled to vote as freely as a native, without going through any form of naturalisation. He is also equally free to run for any office or for Member of Parliament. Unfortunately, under a reactionary Government, Canada has seen fit to build up a wall of protective duties against commerce with the outer world,—even with the mother-country. In consequence, she has suffered much lately from hard times, still more of which are before her, unless this pernicious policy is abandoned.

Through it all manufactured necessities have been raised to a false price, which the farmer has to pay, though the value of all he produces must be fixed by the demand for his surplus in foreign markets; while, owing to the over-production fostered by the unhealthy stimulus of protection, many factories have often to be closed, throwing their workmen out of employ. When working full time they do not give the wages current in the western agricultural districts, nor do their workmen add to the actual worth of the country, as they would do if engaged in pursuits that could be made profitable without being bolstered up by protection, but are, in fact, living on a tax raised from their fellow-workers,—as much paupers as though supported by a poor-rate.

Protection's barriers, to be of any avail, will have, like the levees of the Mississippi, to be raised from time to time, till, unless the people become weary of their burden and cast it off, Canadians will ere long pay as heavy a tax to their manufacturers as do their cousins across the border. This question has already caused much dissension in different parts, and may ere long end in the disruption of the Canadian Confederation.

## CHAPTER XI.

## SPORT.

**A**LMOST all over Western America and the Canadian Provinces, the frequent marshes, lakes, and rivers afford splendid wild-fowl shooting and fishing. This is more especially true of Manitoba, the provinces west and north of it, and the pasturage districts I have previously mentioned.

Through this latter district the Kan Kee River, from Momence, in Illinois, eight miles west of the Indiana line, to its source, over 120 miles north-east in Indiana, affords some of the best wild-fowl shooting in the world. It is a very winding stream, travelling on an average fully three miles to make one straight, which gives a length of river of over 300 miles. It runs through many shallow lakes and wide marshes, in which numbers of wild-fowl breed and remain the summer through ; but this district affords the best shooting in March and April, when the ducks stop there on their way north, and in September and October, when they are winging their way southward to winter.

The average width of the Kan Ka Kee (Indian for "the beautiful"), is some 150 yards when the water is within its banks ; these are fringed with a heavy growth of swamp timber, varying from a quarter to half a mile in depth. In the spring these wooded bottoms are flooded, and the river spreads over them and the adjacent marshes to a breadth of from one to two miles. At this time a light boat can be run all through the bottoms and over these marshes.

In stormy weather the ducks, driven from the open marshes, take shelter in the timber, which consists mainly of a species of swamp-oak, which bears a profusion of small acorns about the size of nuts. On these the ducks largely feed. On a rough day a good shot, carefully hidden with his boat in a brush thicket, or behind a log, near some of these oaks, will get all the sport he can desire. The ducks continually pitching in to him, with ordinary luck his bag should run well up into three figures. The ducks killed in

the woods will consist principally of mallards, wood-ducks, and teal.

On warm, calm days, the ducks do not move much from the marshes; but fine sport can then be had by men hunting in couples, one pushing the boat through the reeds and the other knocking down the ducks as they rise.

Another plan by which first-rate sport can be obtained, is to sink a tin can, the size of a large barrel, in some shallow spot among the wild rice-beds, where ducks are in the habit of "using."

This can should be sunk in the mud till its top is within six inches of the water, and staked firmly down. It should be provided with a cover to keep out the rain when not in use; a shelf for cartridges, tobacco, and whisky-flask, and a seat. A few willow shoots should be stuck around it.

Having run his boat to within a hundred yards of the sink-can, the hunter, who should be provided with long rubber boots, wades to the can, setting out some wooden or rubber decoys around it about twenty yards distant. He will not have to wait long before the ducks begin to pitch into these, not taking any notice of him. He need not leave the can to gather up his game till he has finished shooting, when he can get his boat, load in what he has killed, and make the best of his way back to camp. In sink-can shooting on the river marshes, the bag will consist principally of red-heads, spike tails, American widgeon, and blue-bills, with an occasional goose; but, to get many of the latter, the hunter must repair to some of the shallow lakes. From a can sunk on the edge of one of these, both geese and brant should be obtained in large numbers. Shooting from a can is almost the only way to get red-heads, which, next to canvas-backs, are the best duck that flies, as they are a very wild bird and seldom take to the woods.

I will now describe one of these shallow lakes. Beaver Lake lies about six miles east of the Indiana line, and a similar distance from the Kan Kee River, with which it is connected by a ditch or canal fifty feet wide, cut for drainage purposes. It consists of some 400 acres of open water, seldom over five feet deep, surrounded by a deep and treacherous swamp rather over a mile wide. This marsh is so thickly covered with a growth of bullrushes and reeds, four to six feet high, that it is impossible to

force a boat through it ; so the only approach to the open water is by the afore-mentioned canal.

In the spring this open water is covered with myriads of geese and brant, while flocks of swan, whose cry when on the wing resembles that of a pack of hounds, are continually pitching in.

I have known frequent occasions on which seventy-five to a hundred geese and brant have been killed in a day by two guns ; and, on one exceptionally windy day, a man succeeded in bagging over fifty swan to his own gun. The bordering marsh teems with ducks all the year, except in winter, but it is hard work wading through it after them, though in August, before the young ducks have got very strong on the wing, fine sport can be had in it. Thickets of low willows are scattered over the marsh, in which thousands of aquatic birds breed. During the breeding season I once forced my way to a thicket, some four acres in extent, used by the night-heron, or qua-bird. On my approach, the birds rose in crowds, uttering deafening cries. They seemed almost inclined to attack me, as they flew close enough to nearly strike me with their wings ; indeed, several of them did pitch on to the dog that was with me, but a shot or two from my gun drove them off. On entering the thicket I found several nests, loosely constructed of sticks, in every bush, some containing three to four bluish green eggs, about the size of a duck's, in others young in all stages of growth. I took some of the eggs back to camp ; when boiled, the white was perfectly clear and transparent, and the yolk a deep blood-red. As the thicket was over four acres in extent, and the bushes very close together, some idea of the enormous number of birds breeding here may be obtained.

On Mud Lake and English Lake, higher up the river, equally good sport is to be obtained.

The best way to go wild-fowl shooting is to camp on one of the high, wooded islets with which the marshes are studded. On most of these plenty of wood can be obtained for the camp fire, and a dry, sheltered spot found on which to pitch the tent. Tents are bulky things, and had better be obtained in America ; but waterproof ground sheets and camp blankets should be taken from England. Provided with plenty of these, nothing can be

more enjoyable or healthy than a couple of weeks of camp life, especially when ducks are thick. Colds in camp are unknown, and the appetite of even the most dyspeptic man becomes there something appalling.

For wild-fowl shooting, a heavy 10-bore gun about 10 lb. in weight is best. If inclined to go to some expense, the very best gun for a man to take out is a Greener. They are very strong, well seasoned, and of excellent workmanship, which a short anecdote I may here tell will prove. Just in front of my house, the river, which is here very crooked, has cut for itself a channel through the bank, by which a bend of nearly a mile is avoided, consequently it runs through the cut with great swiftness. A few yards from the bank, in the heaviest current, is a snag, or fallen tree, sticking a few inches out of the water. Late in November, a young fellow staying with me, not long out from England, attempted to run a boat through this cut. He was not the expert boatman he thought himself, so the current soon got the better of him, running him on this snag. The boat overturned, and, though the luckless youth succeeded in scrambling out, my favourite Greener gun, which was in the boat with him, went to the bottom.

On his return to the house, the immersion, or the whisky taken to keep off any ill effects from it, seemed to have affected his brain; in consequence, his particulars as to the exact spot where the gun had fallen out were rather vague. Coupling this with the swiftness of the current, I thought it better to defer operations for the recovery of the gun till the river froze over. It was fully two weeks later before the ice on the cut-off would bear and any attempt could be made to get the gun. Armed with a garden rake attached to a long pole, we then repaired to the place. The ice was very clear, and, by covering my head with a blanket, I soon descried the gun, nearly buried in sand, in about sixteen feet of water. A hole was cut, and in a few minutes it was triumphantly landed. What was my surprise to find, that, notwithstanding its long immersion, the gun, with the exception of being somewhat rusty, had not sustained the slightest injury. The stock was not the least out of shape, and the locks worked perfectly, so well, in fact, that I shot the gun all through the following spring without removing them or cleaning any part of their

mechanism. Had not the woodwork of the stock been splendidly seasoned, it must have swollen and crushed this mechanism to pieces. Though this gun only weighs  $9\frac{1}{2}$  lb., men come from far and near, when any important match is on, to borrow it, rather than use American guns of much greater weight and double the cost.

If the settler is not prepared to go to the cost of a Greener gun, he can be well suited with a cheaper but very serviceable weapon by calling at Messrs. Watson & Hancock's,\* who will not let him leave the shop till they have satisfied him, both as to price and quality. Messrs. W. & H. make a "special" hammerless gun, certainly the cheapest in the market. The cocking is effected by a new patent, which is a great improvement on the old style. They also supply all sorts of fishing tackle. A gun of some sort he should certainly take, as guns in America are dear and poor, there being a duty of 70 per cent. on those of English manufacture; but an emigrant is allowed one gun, if it has been previously used, free of duty. He should also take a supply of Messrs. Kynoch's solid brass shells, which he will find superior to any other maker's in durability and ease of re-capping; while they are infinitely cheaper and more satisfactory than paper cases, as they add considerably to the shooting qualities of the gun.

River shooting in the autumn quite differs from that in the spring, as the woods are then quite dry, water only being found in the river itself, and in the deep, shaded bayous which pierce the timbered bottoms in every direction. From the end of September to the end of October, these pools are filled with ducks on their way south; then a man who can sneak quietly upon them, which is easy to do, as the timber is now thick with leaves, may, if he has a good dog to recover his game, be certain of a heavier bag than he will care to carry (thirty-three mallards weigh about 100 lb.). At this season of the year I have frequently killed eight and ten mallards at a shot. As I before mentioned, young duck shooting on the marshes affords good sport in August, and during September heavy bags of wood or summer duck can be made on the river. During August, a man with a good dog can get plenty of prairie

\* See advertisement on page 107.

chickens on the high ground, but later on they get together in large flocks, and are so wild it is hard to get a shot at them. The prairie chicken, which closely resembles the grey hen, is a beautiful bird, both to shoot and for the table. Tree grouse, called in America partridge, are moderately plentiful in the woods; and quail abound in the oak-scrub. They are hard to see till the winter takes off the leaves, but then a good quick shot can get plenty of them.

In spring and autumn snipe, both jack and sand, are very plentiful in localities suited to them; they are not at all wild, and a good shot will often bag thirty to forty couple a day. Plovers of several sorts (Kildeers, ringed, golden, &c.) are abundantly met with everywhere.

A small species of hare, about the size of a rabbit (the Americans call it a rabbit, but it is undoubtedly a hare, as it does not burrow, and has but one litter of two or three young annually), are very plentiful everywhere. On the western plains jack rabbits, as large as the English hare, and in the Canadian provinces snow hares, are found. During July and August woodcock are plentiful in the river bottoms, but the leaves are then so thick it is hard to see them, as they are up and down again in a few seconds.

There are a few deer in Missouri, Indiana, Minnesota, and Michigan, and lots across the Canadian frontier. In all the heavy-timbered districts, both there and in the States, are wild turkeys, but this magnificent bird is so wild it is seldom obtained unless by expert rifle shots.

Trapping, which is generally carried on in March and April, when the fur is at its best, is fine sport, but requires considerable experience, which can only be obtained by careful observation of the habits of the fur-bearing animals. The principal of these are musk rat, mink, raccoon, skunk, opossum, otter, marten, fisher, wolverine, lynx, and fox (red, gray, cross, and black), the latter rare and very valuable, prime skins being worth £40 to £50 each.

Prairie wolves are common all over the West, as are the grey-timber ones across the British border, where some few buffalo may yet be got. Bear are common in some localities, and moose are met with in Eastern Canada. All the woods teem with squirrels, fox, grey and black.

In the North-west Canadian provinces even better shooting is to be obtained than in Indiana, as there are there many shallow lakes of vast extent, in which myriads of wild fowl breed. The ducks met with in the Canadas and States are as follows in order of plenty:—mallards, spike-tails, American widgeon, wood ducks, teal (green and blue winged), red-head, tufted duck, hard shell, golden eye, blue bill, butter ball (the smallest of ducks), black duck (velvet), canvas-back and long-tail. The geese are Canada, barnacle, snow, and brant. There are three mergansers and several divers and loons.

During the summer there is splendid fishing in the rivers and deeper lakes. In the former are pike, muskalongas, perch, carp, catfish, bass (rock, black and sun), dogfish, eels, and bull heads (that can be caught with a hook, the latter in great numbers, at night), buffalo (often running to fifty pounds in weight), and suckers (that can only be taken with a net or spear). In the lakes are white fish, lake trout, bass, and sturgeon, the latter often attaining an immense size. Across the British frontier brook trout and salmon are plentiful. I have often taken 100 lb. of pike in the Kan Kee in less than two hours.

Besides shooting, as amusements, are cricket, which is rapidly becoming more popular, and base-ball. Racing has always been measurably popular in the country, where several races for local horses are always run at the county agricultural fairs or shows, which are held in every county during September and October, and last three or four days each; but in the large cities trotting was more in favour than running, as racing is called. The last year or two the latter sport has, however, made giant strides in popularity, a great stimulus being given it by the late successes of American-bred horses in England. For some reason or other, the American horses seem to wear longer, both in wind and limb, than their English brethren. A reference to the steeple chase calendar for the last year or two will show that, after leaving the flat, most of them take with great aptitude to jumping. Looking at these facts, I am sure that men of experience in the business could make much money breeding horses in suitable localities in America, as their expenses for hay and grain would be very much lighter there than in England. The price of thorough-

bred stock, in face of the large amounts now added at the great gate-money meetings, must largely advance, especially as the sport is still growing in popularity, and these amounts are likely to be increased in the immediate future. Under the present Customs regulations it is impossible to take any English horses over to run for these events, as it is only by swearing that an animal is meant for breeding purposes only, that it is allowed to enter the country without the payment of a heavy duty. It is possible that, on the owner giving bonds that the horse should leave the country as soon as the race was over, it might be admitted free; but, in the event of this stipulation not being carried out, duty would undoubtedly be collected. In view of the heavy stakes that will now be offered to be run for in America, it behoves the Jockey Club, in the interest of English owners, to have these laws looked into, as it is manifestly unfair that American horses should freely come to England to contest for her richest prizes, while English horses are practically debarred from visiting the other side.

What little betting is now done on the American race-courses is mainly by the aid of pools. The system is as follows:—Let us suppose that Paradox, Melton, Luminary, Kingwood, and two comparatively unknown horses, were engaged in a race. The pool-seller would enter the box and announce that he was about to sell a pool, inquiring, “How much for the first choice?” Let us say some one would bid £100, when it would be at once knocked down to him, and Paradox, of course, taken; the auctioneer would then say, “£100 in the pool and Paradox sold. How much for the second choice?” there would now be some spirited bidding for second choice, which we will say is eventually knocked down for £80 and Melton chosen. The cry will now be, “£180 in the pool, Melton and Paradox sold. How much for third choice?” Third choice will possibly fetch £50, and Luminary be taken, while fourth choice for Kingwood should fetch a like sum. There is, therefore, £280 in the pool, and the auctioneer proceeds to sell the field, which, fetching, say £20, makes the total pool £300.

The auctioneer now turns to the purchaser of first choice and asks him whether he takes the pool; if he says “yes,” the pool stands; if he refuses, it is put up over again. In

the event of the pool standing, the holder of the winning horse is entitled to the whole of it, with the exception of £10 per cent., which is deducted by the pool association. In such a pool the odds against each horse would be :—

Paradox	...	...	...	...	17	to	10
Melton	...	...	...	...	19	„	8
Luminary	...	...	...	...	22	„	5
Kingwood	...	...	...	...	22	„	5
Field	...	...	...	...	25	„	2

The pool association would net £30, the greater part of which would go to the race fund; this tends to swell the added money.

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## CHAPTER XII.

### CONCLUDING REMARKS.

I HAVE only had space to refer at length to a few of the many businesses that can be profitably engaged in in America and the Canadas. With a capital of £500, a really good income can be made from a cheese factory or a creamery; either of these should be located in the centre of a good grass country, where suitable buildings must be erected; from there, carts are sent daily in all directions, to gather up the milk, if a cheese factory is decided on, or cream, if a creamery (butter factory) is preferred. It is usual for the proprietor of the factory to provide graduated cans, in which the milk is placed as soon as strained; by a glance at these the driver can determine the amount of milk, in receipt for which he gives a ticket. These tickets are cashed on presentation at the office of the factory. The cans used for collecting cream are cylinders 2 ft. high by 8 in. in diameter, fitted with a narrow slit of glass in front divided into inches and fractions; by looking through this slit, the collector can determine how many inches of cream there are on the milk, which is then

drawn off through a tap at the bottom of the can and the cream emptied into the collector's receptacle: an inch of cream in such a sized can will make one pound of butter; in making cheese and butter by this method the farmers' wives are saved much labour, and a superior article of even grade produced. If a number of hogs are kept in connexion with the factory, the proprietor can utilise all his waste material.

There are also good chances for brewers in the country towns, as I am sure, if a decent article in the way of English beer was introduced, it would soon drive out the lager. The capital necessary for this must depend on the ambition of the man about to engage in it; as barrels are very cheap in America, a start could be made on as little as £200.

On a like capital, a retail dealer in hay and grain may make a good living in the suburbs of the larger cities; with enough money to rent or to erect plenty of warehouse room, and get in a supply of hay while prices are low, he will very rapidly double his money.

£200 would be sufficient to start a small public-house (saloon), as, though the licence-fee in most States is 500 dols. per annum for beer and spirits, or 150 dols. for beer alone, this can be paid quarterly in instalments. The profits from this business are enormous, as may be judged when a small keg of lager, costing 1 dol. delivered, will draw out 100 glasses, which will retail at 5 cents each, or a profit of 4 dols.; and a gallon of whisky, costing by the barrel 2 dols. per gallon, will at 10 cents a glass retail for an average of 10 dols.

The same amount could be profitably utilised by a retail coal-dealer or butcher, the latter buying the meat suitable for his trade, ready dressed, from the packing-houses, which saves him the risk of having those parts not suited to his requirements left on his hands, which might be the case if he killed his own beasts. Carried on in this way, the butcher's is a clean trade, which may be engaged in by anybody. The bulk of the demand is for steaks and chops, from which the thrifty American will insist that every particle of bone is removed before weighing.

Market-gardening is a paying business that can be carried

on with small capital. Comparatively few men have engaged in it up to now; so in this there are very good openings for men of experience.

In any of the good shooting districts a dealer in poultry and game can do a paying trade, buying game from the local sportsmen and poultry from the farmers, then shipping them to the large cities, where they are in good demand.

The following businesses may successfully be carried on by men who have gained the necessary experience and can command a capital of £500 or over:—

*Country dealer in grain.*—A hand-to-mouth trade in this might be carried on on a much less capital, as the average value per car-load would not exceed £40; but, to make a good thing in this trade, the dealer should be able to buy a considerable quantity of grain when prices are low and farmers delivering freely. This he should be able to hold till deliveries fall off and prices stiffen, when his profits will be doubled. He will also be frequently called on, when roads are bad and deliveries impossible, to make small advances to farmers on their contracting to deliver grain in the future.

*Tanning in some favourable location.*—Tanneries are not very plentiful, and hides frequently travel long distances only to be returned to the initial point in the form of leather. A local tanner would save the double freight, besides making the profits that under the present system accrue to the middlemen, through whose hands the goods pass.

*Dealer in retail groceries or dry goods (draper).*—In the suburbs of large towns, and in the new railroad towns continually springing up, there are good chances for men to start in these lines, with a certainty of a trade growing as the town grows.

*A drug store* (chemist's shop) in such places would also bring in a good income, as the profits made by retail drug-gists and fancy-dealers are enormous.

*Lumber dealer.*—In every new town there is room for a dealer in lumber (boards, scantling, shingles), &c.; building both in the town and surrounding country are sure to be going on to a large extent, and a man of ability and experience will make large profits.

*Wholesale hay dealer.*—This business would be carried on in or near a large town, the dealer buying in car-lots from country dealers, and contracting with them for future deliveries. His customers would be the retail dealers, large livery-stable keepers, and manufacturers. Very profitable to the right man.

A man having £1,000 or over might engage in any of the following:—

*Cattle-feeder.*—The course a cattle-feeder would pursue would be to buy feeders from the cattle-raisers and drive them down either to the distilleries or the centre of a good corn district. If taken to the distilleries, he would rent from them whatever number of stalls he required, and a certain quantity of *swill*—that is, the ground meal of the Indian corn, from which the alcohol has been distilled. This makes one of the best fattening foods possible. This swill would be delivered in the desired quantities in the troughs of his stalls through pipes. In conjunction with it the poorer grades of prairie hay would be fed, for which he would contract with some dealer or raiser. It is not desirable to feed a better grade of hay, as the cattle only require to eat enough of it to hold the swill and enable them to digest it, for which purpose the coarse marsh-hay is best adapted.

*Brick and tile manufacturer.*—Tiles are now in great demand throughout the West, as the advantages of under-draining are becoming better understood, while the use of brick is getting more in vogue. This is, therefore, a good business for a competent man.

*Dealing in real estate.*—Sharp men very rapidly make fortunes at this business. It consists of getting rid of land and houses for owners on commission, renting the same, and buying options on land (paying a very small percentage on its value for the privilege of the refusal of it for a certain time, in the expectation before the time expires of re-selling it at a profit).

*Bill-discounter.*—Capital being scarce in America, it is very much the custom to take notes largely. In event of a sale at auction of farm-stock, or almost anything else, the sale is not for cash but for notes, with from nine to twelve months to run. These the holder will probably want to

discount, and, as banks are scarce, a bill-discounter can do a good business and make very large profits. In time he may add banking to it as his capital increases, and soon make a fortune.

*Hay or grain on commission* is a safe and fairly remunerative business if one has a good connexion. With £2,000 a man might commence banking in a small way, increasing his operations as his capital grew. Banking is most profitable in the States ; but, notwithstanding this, there is a great dearth of banks, many towns of considerable importance being totally without banking facilities. The reason is that there are but few men with sufficient education to carry on banking who have the necessary capital ; and large banking corporations, with branches throughout the country, have never yet been started. Men with the proper qualifications can soon make fortunes banking in America, besides conferring a great benefit on other business.

I should not advise any one to go into hotel, restaurant, or boarding-house keeping. This is the native-born American's favourite business ; it is, therefore, over-done ; nor in any case could an English person hope to compete with such an adept at the business as the Yankee is.

I do not recommend that a settler on leaving England should overburden himself with luggage, but a reasonable amount properly handled will add but slightly to his expense. The steamboat companies allow a first-class passenger 20 cubic feet of luggage, a third-class 10 cubic feet, charging 1s. per foot above this quantity. The railroads on the other side allow 200 lb. to a first-class passenger and 100 lb. to an emigrant. All in excess of this should on landing from the steamer be sent to the passenger's destination by *freight train*, when the cost will be trifling. This is important to remember, as the charge for overweight luggage by passenger train is high (six or seven times the cost by freight), and always enforced. As woollen clothing is dear and bad, both in America and the Canadas, a plentiful supply of this should be taken (not forgetting all old clothes which will come in very useful over there). Flannel shirts, and underclothing, and above all things some sailors' jerseys, not very heavy ones, but of the best quality, should be taken (these will be found invaluable both in summer and winter, and should on no account be

forgotten), also some corduroys; all of these can be obtained from Messrs. Hope Brothers, Ludgate Hill, who have frequently supplied both myself and friends; so that, if my name was mentioned to them, they would know exactly what was required, and be able to give very useful advice.

Linen tablecloths, napkins, handkerchiefs, &c., should be taken. For them try Robinson & Cleaver, Belfast.

Some blankets and rugs should not be omitted, as they cost three times as much in the States; no need to take sheets or pillow-cases, you can get them there.

Ladies should not forget to take at least two serge and one silk dress, as these cannot be obtained unless at a very high price in America; also ribbons, laces, needles, and stockings. Cotton goods can be obtained out there almost as well.

It is very necessary to take out some steel, buckhorn-handled, dinner knives, carvers, and sharpening steel, as they cannot be obtained over there for love or money, the table cutlery being infamous, while, as the meat is often tough, good steel is required. Good electro-plated forks and spoons should also be taken; while a bill-hook or two (a good brace and bit) and a few of the lighter tools will be useful. Don't forget scissors, especially nail, needles, and a pocket-knife or two; but don't take any axes, saws, or heavy tools, as you can get them equally cheap and well out there.

Bloom & Co., Holborn, are now selling a quantity of condemned army stores; sheepskin coats, loin-protectors, and sleeping pants, which are being sold at a great reduction, will be found very useful to take out.

Half a dozen pairs of good stout English boots should also be taken, as it takes any one some time to get used to wearing long boots continually, and, unless they can be changed occasionally, sore feet are likely to ensue. Don't take any rubber boots: they can be bought cheaper there, and better suited to your requirements.

English-shaped saddles cannot be obtained in America. When you get one, have it soiled, so that it will pass the Customs. See that the saddle you get has plenty of "D's" on, and that they are welted on to the tree, not merely sewn to the leather. A head-stall bridle is very convenient. Messrs. A. Davis & Co. make a specialty of this,

which, with their colonial saddle, can be obtained from them at a most reasonable price. If you are going in for riding, take a knee-rug or two, which you can obtain from them, also some cord breeches, which you can get at Hope Brothers.

Eno's Fruit Salt, Pyretic Saline, and Beecham's Pills are most useful things to any foreign traveller.

Take out some wooden pipes and tobacco-pouches, but only enough tobacco and cigars to last the voyage. You can get very nice pipes at Philips & Son's, 39, Hay-market.

I may mention that the colonist should endeavour to get everything he takes out with him of good quality, but that it is no good patronising expensive West-end tradesmen ; their only advantage is, they may cut a little more fashionably, but this will be of no advantage in the West, where wear, not style, is required. Don't be persuaded, either, to buy a lot of useless novelties and knick-knacks ; they only run away with money, and will be no use to you out West. I have seen lots of fellows come over with expensive silver-mounted dressing-bags, silver flasks, boot-trees, and such impedimenta, which only lie kicking about, or are sold off for half their value. Don't bring out any camp cooking-stoves, or any of that trash, but only good plain useful things, the merits of which have been well tested. It is not advisable to go to much expense in the way of boxes ; one good-sized portmanteau and one trunk, not more than 15 in. high, to go in the cabin, are all that are necessary ; more will be of no use to you out there. Pack your stuff rather in stout canvas, or, better still, in Silver's hold-alls, or War Office bags, to which I allude further on.

Any reasonable amount of personal luggage and household effects are allowed to pass the Customs into either America or Canada duty free, if the head of the family swears an affidavit before an American Consul that it is his intention to reside permanently in the country. This had better be done before leaving England. The American Consulate in London is 15, Abchurch Lane, but there are vice-consuls in all the large provincial towns. Be particular to use or soil all new things, especially leather ones, and don't take any pieces of new material not made up.

No person intending to go to America or any of the

Colonies should fail to pay a visit to the establishment of Messrs. Silver & Co., who make a business of supplying young men starting abroad with every necessary. They are at present located in temporary premises at 124, Leadenhall Street, having been lately burnt out at Sun Court, 67, Cornhill, where they are now rebuilding on a much larger and more commodious scale. They are the sole patentees of the "Anti-recoil Heel-plate," which should undoubtedly be attached to every heavy gun. Another specialty of theirs is the "Transvaal Rifle." This is the only rifle that it is advisable to take to America, where a weapon carrying a large ball is seldom wanted; for though it will, when required, take the full-sized regulation army cartridge, by an ingenious device, its bore can be so reduced as to fire with perfect accuracy the ordinary rook-shooting rifle cartridge. By their patent barrel-detachment, the rifle-barrel can be removed and an ordinary gun-barrel substituted, which will throw shot with great accuracy. When I last visited Messrs. Silver's establishment, they showed me a letter from the Government tester of firearms, stating that their Transvaal Rifle had been tried up to 1,000 yards with the Government regulation arm with nearly identical results, if anything in Messrs. Silver's favour. This weapon only weighs 7 lb., but when fitted with patent anti-recoil plate does not kick in the slightest degree.

Combining as it does both gun and rifle in one case, for little more than the cost of either separately, it is a tool that must commend itself to all colonists.

They also manufacture their patent hammerless gun with a "truly automatic" safety-bolt, which is, undoubtedly, the safest hammerless gun in the market.

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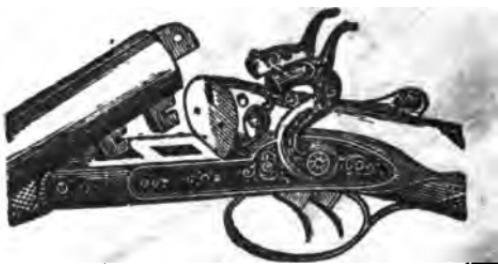
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